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The Constitutional Treatment of Local Diseases. By THEOPHILUS PARVIN, M. D.

That department of *Nosology* which embraces the classification of diseases, is confessedly beset with great difficulties. The imperfections and defects of every system that has yet been devised, is a sufficient proof of this truth. Anatomy, Physiology, Pathology—both as to theories thereof, as to processes, and as to ultimate results—Etiology, Alterations of Function or of Structure, or, in other words, dynamic and organic changes—each has been vainly invoked to furnish a basis for the classifying of human maladies, that shall be at once clear, comprehensive and philosophical.

Comparatively recently, one of the most instructive of living medical teachers* recommends, for therapeutical purposes, the following division of morbid phenomena: (1) Deficiencies of nutrition, or constructive form-building; and (2) Deficiencies of moulting, or form-destruction. Without waiting to discuss the value of this basis, and the practical usefulness of the system which is erected upon it, we wish to refer to a much older classification, finding its inspiration, not indeed in therapeutical purposes, but which bears an important relation, we do not

* Dr. Chambers.

now say how justly, to therapeutical practice. This division is into general and local diseases. All readily admit that the former require remedies addressed to the system; while the converse of the proposition, in reference to the latter, is promptly formulated in the minds of many practitioners, and rules their practice in the treatment of such maladies.

It may be alleged that out of this latter creed, *i. e.*, that local diseases demand local treatment only, the various *specialties* have had their origin. Doubtless this may be true in reference to those specialists, advertising peripatetics, who are ignorant of medicine, and who, having some mechanical dexterity, live upon the credulity of the public, and in their charges prove themselves "extortioners and unjust men." Annually these knaves make their travels through the country, and by newspapers and handbills proclaim their skill, until they count their dupes by thousands, and their gains by hundreds of thousands. We would find the prototypes of the school of specialists which ignorance produces and credulity sustains, referred to in the following passage from Herodotus: "The art of medicine is thus divided among them, *i. e.*, the Egyptians—each physician applies himself to one disease only, and not more. All places abound in physicians; some physicians are for the eyes, others for the head, others for the teeth, others for the parts about the belly, and others for internal disorders." But there is a higher manifestation of *specialism*, a specialism which commends itself not by its ignorance of all other disorders of the body than those of the particular part, or organ, which it proposes exclusively to treat, but by its study of the entire organism, in health and in disease, and which grows out of the development of medicine, and which has contributed, not a little, to its progress. Specialism comes inevitably as the growth of civilization; division of labor is a mark of social progress; the higher we rise in the scale of organic life, and the further, too, we follow physiological evolution, the greater we observe to be the differentation of function; and this, which is true of classes of organized beings and of individual organization, is equally true of social organization. *Divide et impera*, is a motto not without its practical utility in our study of some of the means wherewith to cope, successfully, with the various diseases which afflict the human family. No matter how just or unjust the protest Abernethy made against "the evil that has arisen from the artifi-

cial division of the healing art into the medical and surgical departments; nor how fiercely and bitterly Mr. Syme* may refer to specialists; nor how strongly Sir Benjamin Brodie argued against the establishment of special hospitals, there will be surgeons and physicians; and of these, specialists; and likewise hospitals devoted to the treatment of particular diseases.

We do not propose a defence of specialties; we accept the fact of their existence, and we think the divisions of professional labor will, so far from diminishing, rather increase, though we may never see the day when we shall read, as wittily suggested in a recent number of a non-professional publication, upon a door plate, "John Smith, left-leg amputator."

Yet the question will present itself, whether there is not a tendency on the part of those giving themselves to the study and treatment of a particular class of local diseases exclusively, to magnify in their own minds the importance of such maladies, and content themselves, too often, with an almost, or even entirely local therapeutics? Even if this question could be truthfully answered in the negative, there would still present itself this fact, patent to the observation of every intelligent physician, that there are practitioners who frequently commit the very error, commit it over and over again, which may possibly be attributed to some specialists. Hence we believe an inquiry into the *constitutional treatment of local diseases*—upon what it is based, how sustained, and how limited, can not be entirely valueless.

First, what do we mean by *general* and by *local* diseases? By the former we mean such maladies as affect the entire animal economy, or the organic life, *e. g.*, the essential fevers, phthisis, syphilis, scurvy, etc.; by the latter, those that occupy one part of the body, or a single organ, *e. g.*, a furuncle, an aneurism, an ulcer, a vaginitis, a conjunctivitis, etc. It will be observed that by this definition of local maladies, we may have them internal as well as external. And here we observe that merely because certain organs or parts of the body are accessible to local therapeutics, to conclude therefrom that such treatment is always required, would be only

* Still advancing, we found squatted in the very center of our path, those misbegotten imps, the "specialists," chattering and grimacing, with a view of deterring us from entering the fields which they have had the presumption to claim as their own peculiar property. Disdaining any discussson with this ill-favored crew, we discharged some explosive missiles, which had the happy effect of their speedy dispersion, the whole pack scampering off with a howl of impotent rage." (*Clinical Lectures, London Lancet*, June 2, 1855.)

more irrational and illogical than to argue that other parts and organs not being thus accessible, and therefore escaping all direct assaults upon their diseased condition, therefore the former should never be treated by local agencies.

Having thus explained these two terms in their application to morbid phenomena, we propose to pursue our inquiry in the following order:

I. The constitutional origin of many local diseases.

II. The modifications which the constitution exercises upon other diseases even when these have not such origin as the former.

III. The influence of the local disease upon the constitution.

IV. The testimony of therapeutics: *cura ostendit morbos.*

V. The teaching of medical authorities.

I. THE CONSTITUTIONAL ORIGIN OF LOCAL DISEASES.—

Although the phenomena of diseased action are multiform, it is in accordance with sound philosophy, as well as with the revelations of growing science, to attribute them to a few ultimate causes. Matter has countless forms, but only a small number of elements; the forces which are at work in the organic and in the inorganic worlds, binding and loosing, building up and destroying, are not numerous: ignorance multiplies causes, science diminishes their number, and with every step of its progress makes larger inductions and more comprehensive generalizations. So too, when we come to study the action of special morbid causes, the results are in correspondence with this truth—a single cause, and various effects. Let several persons be exposed to a cold rain for example. One may have an attack of bronchitis, of pneumonitis, or of pleuritis; another suffer with neuralgia; a third with rheumatism; a fourth with inflammation of certain lymphatic glands; a fifth with diarrhea, an enteritis, or a colitis, etc. The late John Hunter, (*Sir Everard Home,*) in consequence of throwing a stone with over-exertion, strained his pectoral muscle; the lacerated fibres produced hæmorrhage and swelling; he became faint and required rest for some time, but ultimately did well. A precisely similar accident occurred to another gentleman; and the tumor, instead of disappearing with rest, ultimately assumed the cancerous character, and the subject died. Clay pipes are smoked year after year by thousands; sometimes one of the number is attacked with an epithelioma of the lower lip; then of those attacked, some may have the

abnormal growth excised, and of those some may witness no return, while in others the disease reappears and extends its ravages until death results.

Now, how explain these varied phenomena? Manifestly by differences of individual constitution, original or acquired, permanent or transitory; differences which find their expression in differences of general or of local results. We know too, that an individual may be exposed to a morbid cause at one time in his life, and no disease follow; but subsequently the same cause may act most efficiently. We know also, that bad hygienic conditions favor the development of both general and local diseases, and this they must do through some modifications induced in the constitution. And illustrative of this, we have Dr. Marston's statements, *Beale's Archives*, Vol. III., in reference to ophthalmia. "The disease seems to have some intimate connection with miasmatic influences, and my own experience and observation would lead me to infer that it prevails with diseases incidental to bodies of men exposed to malarious and effluvial emanations. The convicts in Gibraltar, however, seemed to be tolerably free from diseases of an epidemic type. In Malta, on the contrary, the barracks in which ophthalmia appears, yield other disorders. Typhoid or enteric fevers; gastric, remittent, rheumatism, and certain forms of febrile dyspepsia are common at the same time, or, at different periods of the year, and during different years, in the very same barracks, which yield long lists of ophthalmic disease,"

It is manifest from what has been said, that we may have certain conditions of constitution, either permanent or temporary, which determine the manifestations of morbific agents. Those which are permanent may be considered under the head of *diatheses*. The same meaning has not always attached to the word *diathesis*, nor does it now always bear, in medical minds, a common interpretation. In a most interesting monagraph, *Des Diatheses et des Cachexies*, *Par Victor Timothee Feltz*, *Strasbourg*, 1865: the author traces its history as interpreted in different ages. "Those who have followed Aristotle, have used it to express both the state of health and that of disease." "With Galen it was a permanent state, a fixed disposition of the organism, anterior or consecutive to every morbid affection." Some have regarded it as a predisposition to disease; others, as a sort of balance between health and disease; still others, a disease actually existing but not developed. But,

not to repeat all the definitions that have been given, it may be said that the word diathesis, as generally understood—and we here use the words of Dr. Aitken—means: (1) "The existence of *latent* conditions of the body itself, necessary for the development of particular diseases; (2) A tendency to the development of special and peculiar disease during the course of the nutrition and other morphological changes between the solids and the fluids of the body, and which are only influenced by the operation of agents from without, acting as stimuli or excitants to the morbid development."

The author of the monograph to which reference was made a moment ago, attempts a more precise and scientific definition: "The entire organism may be divided into cell-territories; it is the cell only which lives, and every thing in the organism gravitates around these living unities, which themselves escape our investigation when we attempt more than the study of their mutations." "Behind all these mutations we find *life*, and life we can know only by its phenomena; just as electricity will always be an enigma to the physicist, or as affinity, in its essence, can never be known to the chemist." "Now instead of accepting a definition of diathesis, which only includes the entire economy considered as a whole, it would be more in accordance with the developments of medical science to regard it also as a special disposition of the tissues, both liquid and solid of the organism."

We have learned from the teaching of two of the first of British physiologists, Drs. Bennett and Beale, not to attach so much importance to the cell itself as has been done by many on the continent, following the teachings more especially of Virchow. With Dr. Beale the cell-wall counts for but little; it is *formed* material, and no longer living; but in the cell-contents is that matter which truly lives. Hence "these living unities," to which our author refers, and around which everything in the organism revolves, can not be predicated of the cells themselves, but of the germinal matter which they enclose and from which they have been produced.

We venture another criticism, though confessedly with much hesitation. Pathology will not always permit us to divorce one tissue from another; they are often joined together in a common affection; inflammation, suppuration, various other morbid tissue-changes may invade very different structures; bone, cartilage, glandular structures, may suffer from cancer as well as the epithelial, or

the connective tissue; nor will the fact of this disease, affecting one tissue, exempt others in the same individual, but rather render it probable that some of them, at least, will be thus visited. Hence we can not see that it simplifies our knowledge, renders it at all clearer or more satisfactory, to consider diathesis as a peculiar disposition of each tissue. However, having said this much of the author's views, we will take, in our studies of local diseases of constitutional origin, the diathesis he makes of the blood: these are hypertrophy and atrophy, the former divided into *polyemia* and *leukæmia*, and the latter into *chloro-anæmia* and *melanæmia*, and show how these may manifest themselves by diseases of particular parts or organs of the body. Nevertheless, we do not believe that these general conditions of the blood will explain even a moiety of the maladies, either general or local, from which the organism may suffer, and which are dependent upon blood-changes; and hence it will be necessary, after taking the view proposed, as based uponthese general diatheses of this tissue,* to consider other conditions of the blood which may cause local disease. As to both the second variety of blood-hypertrophy *leukamia*, and of blood-atrophy *melanæmia*, they are, comparatively, rare conditions, and but few words need, in reference to our present purposes, be said of them. "Leukæmia renders the subject liable to hemorrhages, to dropsical effusions, and to engorgements of internal viscera;" while melanæmia may cause embolism and thrombosis. Now here we have, in strict definition, local diseases arising from this blood-diathesis, and for the curing of which, if cured at all, local treatment is of but secondary importance.

Passing now to the other varieties of hypertrophy and atrophy of the blood, we find in the first a state which corresponds to the phlogistic diathesis of old authors, and the sthenic diathesis of Bown; it is, in a word familiar to all, *plethora*. Here we have an actual increase in the number of blood-globules, and possibly a greater vitality thereof. What local diseases may result? Cardiac hypertrophy form the stimulating influence of so rich a blood; various local congestions and inflammations; venous enlargements in some parts of the body; ulcers of the inferior extremity,—for these, as pointed out by Mr. Critchett, we believe, may occur as well in plethora as in anemia; hemorrhages, the blood breaking through its distended

* To speak of the blood as a *tissue* may at first sound strangely to some ears; nevertheless Virchow, *Cellular Pathology*, and many others thus designate it, and we believe correctly.

channels, as the streams swollen with spring floods sweep away the barriers that have hitherto confined them. Here, again, local therapeutics is but secondary to that treatment addressed to the general condition of the system. In blood-atrophy, anæmia, or chloro-anæmia, we have the red-globules lessened in number and in size. Take the anæmia of the girl at puberty, and how various the disorders of the uterus and its appendages, and of uterine functions. Take the anæmia of the pregnant, or of the nursing woman, and ulcerations of this or of that part of the digestive tube: rid the patient of her anæmia, and the local treatment is of minor importance. So too, the nursing woman is more liable to mammary inflammation and abscess after the ninth month of lactation, than she is at any other period, except the first two or three months. And on this point Dr. McClintock remarks, in his *Clinical Memoirs on Diseases of Women*, Dublin, 1863. "This greater proclivity to inflammation after the ninth month of lactation (as compared with the six preceding months), 'must be considered,' writes Mr. Nunn, 'as an induced proclivity, having its origin in a certain condition of the system, brought about by over lactation. This condition of the system is, in fact, a form of cachexia, characterized, by a deficiency of red blood, general debility, impaired digestion, and great bodily languor, etc., a state of the system in which local congestions are very apt to arise, and suppuration is very easily set up." Among other consequences of anæmia may be reckoned hemorrhages, ulcers, various local neuralgias, exopthalmic goitre, et cetera.

In a former part of this paper we alluded to the different manifestations, in different individuals, of a common morbific cause; and professional experience fully confirms the use of such terms as rheumatic, tuberculous, scrofulous, cancerous neuralgic, etc., as describing various diatheses, and by which we explain such various results. Virchow, who seems to hold in as utter detestation *dyscrasia* or diathesis, in explaining the origin and progress of certain diseases, as he does the claims of Dr. Bennett to having first discovered leukæmia, or *leucocythemia*, as the Edinburgh professor will term it, cannot ignore utterly in his discussion of "Tumors," as a factor in the evolution of these morbid products, some peculiarity of constitution. For, mark his explanation of *lymphoma*, or scrofulous diseases of the lymphatic glands: "Here some irritant is conveyed, most often from the skin or mucous membrane, by the lymphatics to the glands.

Thus eruptions of the scalp, and catarrhs of the mucous tract of the mouth, nose, and throat, precede the cervical lymphoma; attacks of bronchitis, the bronchial lymphoma, so common in children, and, in the majority of cases, wrongly termed tubercular disease, while catarrh of the gastro-intestinal tract is a forerunner of similar mesenteric lymphoma. The catarrh, it is true, may be often slight and transient, but the disease has been set a-going in the glands with which the mucous membrane communicates, and holds to them with strange tenacity, even though the exciting cause is past and gone. But something more than this is required. Either through hereditary tendency, or acquired weakness, (a result of bad food and air,) certain parts of the body, the lymphatic glands in particular, are brought into such a condition that a slight irritant, which in another person would produce no effect, causes them to swell up and become the seat of hyperplastic change."

So too, when he discusses bone tumors, we learn that in the production of these, "constitutional causes, such as syphilis, rheumatism, rickets, are undeniable. Hereditary tendency exercises a decided influence, and it is in the early growth of the bone that this predisposition manifests itself." It is true both of these quotations in reference to the views of Virchow are expressed in the words of a reviewer, *British and Foreign Medico-Chirurgical Review*, January, 1867; but they are doubtless correct.

Now it does seem, even to our dim perceptions, very clear that Virchow, while rejecting *dyscrasia* in word, admits it in facts. Why should there be anteriorly to the production of scrofulous tumours, these various other local diseases, scalp-eruptions, catarrhs of mouth, nose, throat, et cetera; or these existing, why should other manifestations follow and persist in certain subjects, unless there were some peculiarity of constitution, hereditary or acquired, some predisposition to such diseases—in a word a scrofulous diathesis, which developes with these various diseases into a scrofulous dyscrasia? So, too, in reference to bone tumours. It is enough for us to repeat that "constitutional causes are undeniable," and that "hereditary tendency exercises a decided influence," to confirm one's faith that we must often seek for the fountain and origin of numerous local maladies in some vice of constitution.

We have dwelt upon these views of the great German teacher at greater length, because he is the founder of a school of pathology, in which we believe too great importance is given to the local

origin of maladies; for, as a *sequitur* to this creed, physicians may attach too much consequence to local therapeutics. And every day's experience and observation, we frankly declare, confirms us in the opinion that the majority of medical men, and not specialists only, devote themselves too exclusively to the treatment of a local disease which may be but a minor matter, requiring no treatment, or only a manifestation of a constitutional state, or finally a cause which has re-acted upon the constitution, and therein produced general derangements, the persistence of which causes its own persistence.

[TO BE CONTINUED.]

Trial for Malpractice. Prepared by DAVID PRINCE, M. D., of Jacksonville, Illinois.

The chief points in this case were a forward dislocation of the tibia upon the astragalus, with fracture of the fibula—in which, at the end of nearly three months, the dislocation was found still to exist, having been either never reduced, or having become redislocated. The displacement, at the end of this period was reduced, and the parts kept in position by an outside splint of wood, pasteboard and bandage.

A prosecution for damages was brought against the physician first in attendance, on account of alleged malpractice, (the case was tried three years after the receipt of the injury) the jury finding for the defendant.

Mrs. Harmon, of Payson, Illinois, aged about 40, made a misstep in going down the door-steps, and dislocated the left tibia forward upon the astragalus, and fractured the fibula two inches above its connection with the tibia, on the 31st of August, 1863.

Dr. J. H. Reynolds attended—making efforts at reduction, and afterward applying side-splints, which extended below the malleoli, but did not apply to the bottom of the foot, and no bandage passed around the foot. Several witnesses testified that the heel appeared too long, after the attempts at reduction had been discontinued.

According to one witness, an inmate of the house, the splints were left off three weeks, while another, also an inmate of the house, testified that they were taken off, and not re-applied at the end of five days.

It appeared from the testimony that the foot was not in an extended position, but maintained a position nearly at right angles with the leg.

The patient was seen by Dr. Prince, in company with Dr. Reynolds, and Dr. Shepherd, of Payson, November 25, 1863, nearly three months from the time of the injury. Condition—the two limbs being placed horizontally upon a chair, resting upon the posterior surfaces of the heels, the injured (left) limb presented the anterior surface of the lower end of the tibia one full inch higher than the corresponding surface of the other leg. There was, therefore, at this time, a forward dislocation of the tibia upon the astragalus, to the extent of one inch. The articulating portion of the astragalus is about an inch and three quarters in its antero-posterior diameter—(the antero-posterior diameter of the whole bone being about two and one-half inches.)

The posterior edge of the articulating surface of the tibia was therefore carried forward of the highest part of the articulating arch of the astragalus.

The fibula presented an angle at the place of fracture, two inches above its connection with the tibia, the angle projecting forward. There was, to a small extent, eversion of the toes, and also eversion of the foot; that is, the inner side of the foot would, in walking, strike the ground, as in talipes valgus. The foot had its natural angle with the leg, being neither flexed nor extended. The striking peculiarity was the appearance of the leg, its position being too near the middle of the foot.

The case was peculiar, in differing from the descriptions of all who have written upon this dislocation. The toes are said by authors to point downward, i. e., the foot is extended. It is easy to see that if the tibia slides entirely beyond the articulating surface of the astragalus, the muscles attached to the heel may pull it up and depress the toes, but in a partial dislocation, like the one in hand—the tibialis anticus, extensor digitorum longus, and the peroneus tertius being put upon the stretch by their fastenings to the dorsum of the foot, by the grooves or fascia in which they move, may balance the traction of the tendo-Achillis.

To reduce the dislocation at this period of nearly three months from the time of the accident, the patient was brought under the influence of a mixture of ether and chloroform, and the foot was forcibly moved in all directions to break up the new-formed adhe-

sions, and the union of ruptured ligaments. The proper relation of parts was at length secured.

The retaining apparatus consisted of four layers of pasteboard, obtained from a bandbox, covering the outer half of the leg and foot, strengthened by a wooden splint, two inches wide, with an orifice in its lower end to fit over the external malleolus, all held in position by a liberal number of turns of a roller. The pasteboard was prepared by cutting a hole opposite the malleolus, and slitting out the heel, to enable this portion to lap in applying the pasteboard to the limb, as used to be practiced by Dr. R. D. Mussey. The material is, of course, first softened by dipping it into water, to enable it more readily to shape itself to the surface of the limb.

I find, in looking over the books, that Dupuytren's splint is in great favor, after the fracture of the fibula, with or without displacement of the tibia, upon the astragalus.

By looking at a cut of this in *Cooper on Fractures and Dislocations of the Joints*, or in *Hamilton on Fractures*, it must appear that this is a very insecure fastening—a straight splint on the tibial side of the leg, held on by a few turns of a roller below the knee, and a few more turns over the ankle, while nothing is applied along the middle portion of the splint, lest the fractured portion of the fibula should be drawn in upon the tibia. It seems hardly possible that a patient can keep his leg sufficiently still to avoid disarrangement of this dressing. If an inside splint is applied at all, it would seem that it should be accompanied by an outside splint, so shaped or so padded as not to press upon the fibula above the malleolus, and arranged so as to secure some inversion of the foot. With two splints, a roller can be applied over them the whole distance, without pressure upon the fibula, except its two extremities. But when the tibia is not broken, it is a good enough splint itself, and if the outside splint is made to embrace the foot, as in the pasteboard arrangement described, motion of the ankle-joint is completely abolished, and the parts brought into the best relations to avoid deformity.

The patient wore the pasteboard splint about five weeks, when it was laid aside, in order that the joint might acquire its proper movements. Some degree of eversion of the foot (valgus) has continued, probably owing to a want of the proper restoration of the internal lateral ligament, and some degree of lameness has, therefore, remained.

Dr. Reynolds was sued for two thousand dollars damages, for malpractice, in not reducing the dislocation, or, if he reduced it, for not securing the joint against subsequent displacement. The case was tried in the October term of the Adams county Circuit Court, 1866. The verdict of the jury was an acquittal.

With regard to the fact of reduction or not, the testimony was altogether non-professional, no physician except Dr. Reynolds, seeing the case during the period of his attendance, and the medical opinion based upon this testimony was divided, some of the medical witnesses thinking, from the testimony, that it must have been reduced, and others that it could not have been. If the reduction had been originally effected, it followed, of course, that the joint became subsequently in some way displaced.

The jury were probably influenced in their verdict by the testimony of the medical witnesses, that this is a rare accident, difficult to distinguish, and often difficult to manage—baffling the skill of some of the most distinguished medical men—and by the legal position that "ordinary skill and care" do not necessarily imply that there should be skill equal to all emergencies, among those who only make ordinary professions of skill. It was plain that the skill brought to the case was not equal to the emergency, but it was claimed that it should not be required of an ordinary country doctor that he should diagnosticate or correctly treat a case such as had baffled the skill of Sir Astley Cooper.

In this connection the medical witnesses were drawn upon for the fact mentioned in *Cooper's Lectures*, (American Ed., p. 613, and in *Cooper on Fractures and Dislocations of Joints*,) that Sir A. Cooper failed to reduce the first case which he saw, and which he even did not understand until he saw a dissection of an unreduced case, the patient having died several years after the accident.

A quotation was adduced from *Hamilton's Report*, in the *Transactions of the New York State Medical Society*, for 1855, in which only one dislocation of the tibia forward was found for sixteen dislocations inward, one of these inward dislocations occurring in his own practice, in which he had failed to secure reduction, though the patient afterward acquired a good use of his limb.*

The cases quoted in *Hamilton on Fractures*, pp. 692–3, were brought out, one under the care of Dupuytren, in which he could

* This unsuccessful case is also noticed more at length in *Hamilton's Report on Deformities after Fractures*, in *Transactions American Medical Association*, 1857, p. 400.

not keep the parts in place, and a considerable amount of deformity resulted—one under Earle, in which the parts could not be kept in place, and in which amputation became necessary on account of projection of bone and gangrene—and a similar case seen by Malgaigne.

The authority of Hamilton was brought forward that "In many cases great difficulty has been experienced in maintaining the reduction, though the reduction itself may have been easy."

With regard to the treatment, by Dr. Reynolds, permitting the limb to remain in the straight position, the authority of usage was brought forward, which is summed up by Hamilton thus: "The leg flexed upon the thigh should be laid on its back in a box, and the foot supported firmly against a foot-piece, at right angles with the box."

The violation of this *authority* was justified by its disregard, in the plan of treatment finally pursued, in the application of a pasteboard splint, and in the permission of the patient to place the limb in the position which was most comfortable. It is difficult to conceive what good reason there can be for placing the leg in a box, elevated a foot or more above the patient's body, when the only indication is to secure the ankle-joint, and parts immediately contiguous, from displacement. Any movement of the limb which does not endanger the displacement can do no harm, while movement of the unaffected joints is a source of great comfort to the patient.

The flexing of the leg upon the thigh is done for the purpose of relaxing the muscles terminating in the tendo-Achillis. This can be of very little importance for the reduction, if done while the patient is in the state of anæsthesia—for the muscles then relax; and subsequently the maintaining of the foot immovably at right angles with the leg, must effectually prevent the foot from sliding back upon the tibia to reproduce the displacement.

INSTRUCTIONS GIVEN BY JUDGE TIBLEY, in the case of Harmon *vs.* Reynolds, tried at the October Term of the Adams Co. Circuit Court, 1866:

1. "The Court instructs the jury on the part of the plaintiffs, that before a person is authorized to undertake, as a physician or surgeon, to treat another for an injury, he is required to have possessed himself of, and have such skill and qualifications

for the treatment of such, and kindred injuries, as are ordinarily possessed by the members of the medical profession; and if, without such skill, he undertakes to treat a person for an injury, he is liable for any injury or damage resulting from a want of the same.

2. The Court instructs the jury on the part of the plaintiffs, that if they believe, from the evidence, that Mrs. Amy Harmon, one of the plaintiffs in this suit, received an injury to her left ankle, either by a partial or total dislocation of the same, and at the time such injury was received, the plaintiffs were husband and wife, and have so continued ever since, and that the defendant Joseph H. Reynolds held himself out as a physician or surgeon, and as such undertook to treat the said Amy Harmon for such injury; then if the jury further believe, from the evidence, that the defendant either failed to reduce such dislocations, or if reduced, to properly secure the continuance of the dislocated bones in their proper place, and that such failure on his part arose from, or was owing to, a want of such skill or qualifications as are ordinarily possessed by the members of the medical profession, or from neglect to use in his treatment of the case, such skill, care and caution, as are ordinarily used in respect to such and similar cases by the members of the medical profession; and that in consequence of such failure the said Amy Harmon was, or has been, in any way injured or damaged, they must find the defendant guilty, and assess the plaintiffs, damages.

3. The Court further instructs the jury, on the part of the plaintiffs, that the term "ordinary" or "ordinarily" is not susceptible of any precise and inflexible definition; that for its import and meaning, when used in relation to skill, care, or caution, reference must be had, in each and every case where the question arises, to the situation of the parties and the business on hand, or in which they are engaged; and its import and meaning varies according to the exigencies which require vigilance and attention, conforming in amount and degree to the particular circumstances under which skill, care, and caution are to be exerted.

4. The Court further instructs the jury on the part of the plaintiffs, that it was not necessary in this case for the plaintiffs to prove, by witnesses, the amount of damages sustained by the said Amy Harmon, by reason of any injury that the jury may find, from the evidence, she has sustained; that it is for the jury, if they find for the plaintiffs, to ascertain and estimate the amount of damages, from the

facts in the case; and in ascertaining such damages the jury ought to take into consideration any pain, suffering, loss of use of ankle, or deformity, which they may believe, from the evidence, followed or resulted from want of, or failure on the part of the defendant to use, such skill, care and caution, as are ordinarily possessed and used by the members of the medical profession, in such and similar circumstances.

5. The Court further instructs the jury on the part of the plaintiffs, that if they believe, from the evidence, the defendant undertook to treat the plaintiff, Amy Harmon, for an injury, then, though they should believe that Dr. Shepherd was the plaintiff's family physician at the time of such injury, such circumstance in no way affects the defendant's duty or liability in the case, and should not be considered by the jury.

6. The Court further instruct the jury, on the part of the plaintiffs, that although they may believe, from the evidence, that the defendant never charged, or the plaintiffs never paid any thing for the defendant's services, in treating said ankle, and although they may also believe, from the evidence, that Dr. Prince never charged or was paid anything for his services in treating said ankle, still such circumstances do not in any way affect or change the defendant's duty or liability in the case, and should not be considered by the jury, if they believe, from the evidence, that the defendant undertook to treat said ankle as a surgeon or physician.

At the instance of the defendant the Court instructs the jury:

1. That in this action the burden of proof is upon the plaintiffs, to prove by a preponderance of testimony, that the plaintiff, Mrs. Harmon, was injured by a want of ordinary care and skill on the part of the defendant in treating her for the alleged dislocation of her ankle, and also to show affirmatively, by a preponderance of testimony, that such injury happened without any negligence or carelessness of said Mrs. Harmon contributing thereto; and the burden of proof is on the plaintiffs to show not only that the defendant was guilty of negligence or want of skill, but that Mrs. Harmon was not guilty of negligence or carelessness.

2. That the defendant was not bound to exercise an extraordinary or unusual degree of skill or diligence in treating the alleged dislocation, but was only bound to use such a degree of skill and diligence as ordinary physicians commonly possess and employ in such cases; and although the jury may believe, from the evidence,

that by the exertion of a very high degree of surgical skill and diligence, the result of the treatment might have been more satisfactory, yet the defendant is not to be held liable, provided the jury believe, from the evidence, that he used an ordinary degree of skill and diligence.

3. If the jury believe, from the evidence, that the alleged dislocation was one of exceedingly rare occurence and difficult of treatment, and that surgeons of great eminence and skill have been mistaken in like cases, both in the examination and treatment of the same, and that a surgeon of ordinary skill would be likely to fail in effecting a complete cure thereof, and that in a large proportion of the cases of like dislocation, which have been observed and recorded by authors of reputation upon the subject, the results of treatment, have been imperfect and unsatisfactory, the jury should take all these facts into consideration, in determining whether ordinary care and skill was or was not used in the present case.

4. Although the jury may believe, from the evidence, that the defendant, treated the plaintiff, Mrs. Harmon, for an injury to her ankle, and that the result of such treatment was an imperfect recovery, or lameness, yet these facts are not sufficient to entitle the plaintiff to a verdict; but it must be further shown, by a preponderance of testimony, that such results were produced by negligence or want of ordinary skill on the part of the defendant, without any negligence or want of ordinary skill, on the part of the said Mrs. Harmon, contributing to the same.

5. If the jury believe, from the evidence, that after the defendant had applied to the ankle of Mrs. Harmon the alleged splints and bandages spoken of by the witnesses, the said Mrs. Harmon, from time to time, without the knowledge or consent of the defendant, took off and replaced said splints and bandages, and improperly or carelessly moved about, and used the injured limb before the same was in condition to be used, and that she fell down, and again injured the said ankle, and thereby negligently contributed to the alleged imperfect recovery and lameness of said Mrs. Harmon, then the jury should find the defendant not guilty, whether he used ordinary skill and care or not.

6. In respect to the means alleged to have been used by the defendant to keep the injured parts in place, the jury are instructed that although they may believe from the evidence that other appliances might have been used with more beneficial effect, yet if

they believe, from the evidence, that the splints and bandages said to have been employed by the defendant, are employed by surgeons of ordinary skill in like cases, and are recommended by good surgical authors and practitioners to be used in like cases, then the defendant is not to be held guilty of malpractice on account of using such splints and bandages, provided, the jury believe from the evidence, that the same were properly applied; and the Court further instructs the jury, that the defendant was justified in using every mode of splinting, bandaging and treating said limb, which the jury may believe from the evidence is recommended by respectable authors or text-books on surgery, and used by surgeons of ordinary skill in similar cases.

7. In determining the degree of credit which ought to be given to the testimony of any witness in the case, the jury should consider any relationship which they may believe, from the evidence, to exist between such witnesses and any of the parties to the suit, also the intrinsic probability or improbability of the statements of such witnesses; also all contradictions in material matters, which appear to exist between the testimony of such witnesses and that of other witnesses in the case; and if, from the evidence, they believe that such witness has wilfully made a false statement or statements, upon any material point or points in the case, knowing the same to be contrary, they may reject the evidence of such witness altogether, except so far as the same may be corroborated by other unimpeached witnesses.

8. If the jury believe, from the evidence, that after the defendant had for a time attended and treated Mrs. Harmon for the alleged dislocation, she informed him that his services would no longer be required, and that he need not again call upon her professionally, unless she sent for him, then the jury are instructed that the defendant was thereby discharged from any further obligation to attend or treat said Mrs. Harmon for the alleged dislocation.

We append to the above report the following account of the proceedings of the Morgan County Medical Society, held at Jacksonville, Nov. 8, 1866, and published in the Chicago *Medical Examiner*, Dec. 1866:

"Dr. Prince, having been called recently to Adams county, as a witness in a suit for malpractice, described the injuries, and made some general remarks suggested by the trial. The case was a rare

dislocation—the forward dislocation of the tibia, slipping over the swell of the astragalus one inch forward of its natural position! The fibula was fractured, but the lower fragment clung to its natural attachments, and was not displaced. Several of the most eminent practitioners of the State, and of the West, were summoned to appear in the case—among others, Dr. Andrews, of Chicago. Not one had ever been called upon to treat, or had known before, of a dislocation of the kind. But little even can be found concerning it in any of the text-books on surgery.

"Dr. Prince remarked, that a mere knowledge of anatomy did not at once interpret the case. It was a question whether the general practitioner should be better informed than the text-books, or whether he should decline rare and obscure cases.

"Dr. Edgar remarked, that as all physicians were liable to be called upon for surgery, they must take special pains in educating themselves for it; they would be liable for prosecution. More prosecutions arise from fractures and dislocations than from any other source in the practice of medicine. Educate yourselves specially to attend to fractures and dislocations. Never attend a case of fracture or dislocation unless you have an intelligent witness with you. He thought medical schools paid too little attention to the education of their students in these important particulars.*

"Dr. Prince thought that students should be taught to state "that in dislocations a cure can not be guaranteed." He quoted Dr. Andrews, of Chicago, "who thought that medical men should not be held by the law responsible for bad practice, as they were not allowed by the law of the State to familiarize themselves with anatomy in the proper way."

"Dr. Askew thought that prosecutions more often arose from the disagreement of doctors than from any other source. If the mantle of charity should be thrown over the little difficulties of practice, there would be much less trouble in the courts about doctors. Instead of trying to rise on their own merits, physicians too often attempt to build themselves a reputation on the failures or demerits of their neighbors. The State should be more rigid in its requirements of

* In the March number of the same Journal, in a report of another meeting of the above Society, at the same place, February 14, 1867, Dr. Edgar is thus reported: "The suit evidently grew out of malice. The man was hunted down by his medical brethren of the same county. It arose from want of professional courtesy. The doctor hoped that medical men would rise above their petty feelings of jealousy, and rivalry, and cease to give cause to the members of other professions to hold them up as proverbially quarrelsome."

qualifications; and should afford ample opportunity for the study of anatomy."

EDITORIAL.—Let us quote from some of our leading authorities, their statements in reference to the luxation under consideration.

In reference to partial luxation of the tibia forwards, with simple fracture of one or both of the malleoli, Mr. R. Adams, in his article on the *Abnormal Condition of the Ankle-Joint*, in Todd's *Cyclopedia of Anatomy and Physiology*, p. 160, thus remarks:

"The complete luxation forwards of the tibia from the astragalus, which we have described in the preceding section, all writers look upon as the more common form of dislocation forwards; while the partial luxation in this direction is considered a rare accident. My opinion upon this subject is quite different; for some experience in these accidents leads me to say, that a complete luxation of the tibia forwards from the articular pulley of the astragalus, is rare, but that a partial luxation in this direction accompanied with a simple fracture of one or both malleoli, is an accident by no means uncommon **** It may not be amiss to subjoin the following case as illustrative of the common partial luxation forwards:

"A man, æt. 22, was admitted into Jervis street Hospital, at three o'clock, A. M., of the 26th of December, 1833. He stated that he and a *friend* had been drinking together in a public house; that, in the middle of the night, they quarrelled; that he was knocked down, and was unable to rise, in consequence of his having received a severe injury of his left ankle; his friend then procured some assistance and carried him to the hospital; at my visit, I found him in bed, complaining of much pain, his leg extended and resting on its outer side; the heel was retracted, and between it and the calf of the leg, instead of the ordinary line which marks the course of the tendo-Achillis, there was a conspicuous semicircular curve (fig. 1. *a. b.*); in a word, the heel was lengthened, and the dorsum of the foot seemed much shortened; in the situation of the ankle-joint in front, there was a remarkably hard, prominent,

[*Fig.* 1.]

transverse ridge, made by the advance of the lower extremity of the tibia and extensor muscles of the toes, while beneath this, there was a marked depression, where the skin and annular ligament seemed, as it were, pinched in, drawn under the lower edge of the articular part of the tibia; the foot was pointed downwards; no movement of flexion or extension could be communicated to the ankle-joint, but it admitted of some little motion in a horizontal, and also in a lateral direction, when the leg was firmly grasped with one hand, and the foot moved with the other. It was remarkable that, although the man had no power whatever over the motions of the joint, he could, while he lay in bed, move his whole limb about with much freedom, and, (as there was probably a locking of the bones with each other), these voluntary movements were not accompanied by any increase of pain. The fibula could be felt to be fractured about an inch and a half above the lowest point of the outer malleolus, "the foot, the outer malleolus and short portion of the broken fibula, formed one system of parts," and were carried for the length of an inch, or more, horizontally backwards, while there was a projection forward, of the lower articular part of the tibia, and the internal malleolus itself was advanced in the same proportion; it is to be observed that there was no crepitus, because it was the deltoid ligament, only, which was torn; the tibia was not broken, and the ends of the fractured fibula were evidently far separated from each other. When the luxation was reduced, which was effected without much difficulty, crepitus could be felt, proving the restoration to its place of the lower fragment of the fibula. This is a species of fracture and luxation which can, by proper management, be readily redressed, and no deformity remains, if time be not lost after the accident has occurred; but if the fibula become solidly united in its new situation, the motions of the ankle-joint are forever lost, and the patient is doomed to lameness for life.

"In the month of September, 1833, a woman, aged fifty-three years, was admitted into Jervis street Hospital, whose left ankle-joint presented all the characters above assigned to the partial dislocation forwards of the tibia, combined with a simple fracture of the fibula; she stated that she had, two months previously, broken her leg close to the ankle-joint, and had been attended at her own house, from a dispensary, by a pupil, who applied pads and lateral splints, but when, after a time, all the splints were removed, she

found that her limb was deformed, her ankle stiff, her foot rigidly extended, and pointed downwards, so as to be nearly useless to her; as two months had elapsed since the accident, before she applied, no promise of relief could be held out to her. She, therefore, left the hospital, but not before I was enabled to obtain a cast of the leg and foot from which figures 1 and 2 are copied. As I was anxious, before these pages went to press, again to examine this case, I requested Mr. L. to make inquiry about her; he learned that the woman died dropsical, a few days before, and with much difficulty procured for me an opportunity to examine the limb, which on careful dissection presented the following appearances:

[*Fig.* 2.]

"The whole extremity was somewhat wasted, the skin on the sole of the foot was smooth and fine, showing that she had been able to walk but little since the accident; the foot was in a position of almost rigid extension, the toes were directed downwards, the range of motion, of flexion, and extension, did not exceed one inch; in short, all the usual characters assigned to the partial dislocation forwards of the tibia, and displacement of the foot backwards, were seen; when the skin was removed from the fascia of the leg and foot, the intervening cellular membrane was found infiltrated with serum; the skin was adherent to the inner malleolus; the vena saphena, and the nerve of the same name, were thickened and firmly connected together; the extensor tendons were stretched over the tibia, and were somewhat flattened; and the grooves which transmit the tendons that play behind the inner and outer malleolus were deepened. We now directed attention to the state of the bones. We found that the tibia was displaced forwards, that its anterior edge was advanced more than one inch beyond its natural situation, and that it much overhung the os naviculare, but such was the obliquity of the tibia, with respect to the foot, that it could not be said to rest upon that bone; between the os naviculare and the inferior articular extremity of the tibia there intervened much fat of a yellow hue and fibrous texture, intervertebral substance; the internal malleolus itself had been broken, and a small

portion of the back part of the edge of the articular cavity of the tibia was detached, and both malleoli were retracted, or carried backwards with the foot; the fibula above the fractured portion was directed downward and a little forward, and was somewhat parallel to the tibia, yet more than naturally approximated to it, a circumstance which accounted for the contracted, rounded form the middle of the leg possessed; the lower fragment of the fibula was directed from below upwards, a little inwards, and very much forwards, so as to make, with its shaft, a remarkable angle, salient anteriorly; this bone had been traversed by the fracture obliquely from above, downward, and from before backward. The external malleolus was placed about one inch and a quarter behind its usual situation, and was consequently dislocated at its tibio-fibular articulation, having burst those strong ligaments which connect these bones together, and which are so seldom found to yield."

Cephalic Version. By Dr. M. B. WRIGHT.

The *Gazette Medicale de Paris*, of February, makes the following synopsis from the *Wurzburger Medicinische Zeitschrift*, (edited by Bamberger and Scanzoni). The article is from the pen of O. V. Franque. We translate from the *Gazette Medicale*:

"Cephalic version is less dangerous, both for the mother and the child. In the Duchy of Nassau, during a period of seventeen years, (1843 to 1859), of 247,570 births, cephalic version was performed 34 times for trunk presentations: of these 34 cases, 27 children were born alive; and in no instance did any accident occur to the mother. Podalic version was performed in 1852 cases, during the same period, and only 795 children were saved. And of the mothers, 106 died. The superiority, therefore, of cephalic version is beyond dispute; the mortality, as regards the child, by the latter method, being but twenty per cent., whereas, by podalic version, it was fifty-seven per cent. As regards the mother, the difference in its favor is still more striking. According to the author, too much restriction has been placed upon cephalic version, too many conditions prescribed, (such as mobility of the child in the uterine cavity, the head being near the superior strait, the regularity of labor, an ample pelvis, no prolapsus of the cord, or protrusion of any portion of the fœtus). O. V. Franque insists that the only

contra-indications to the performance of cephalic version are: 1st. an abnormal form of the uterus, which may be ascertained; 2d. the death of the fœtus; 3d. whenever, from any cause, it may be necessary, for the safety of the child, to expedite the labor."

The above article, on cephalic version, will be highly gratifying to the advocates of that method of aiding labor and saving life, but like all articles merely statistical, it falls short of the practical benefits designed to be accomplished. In Germany, where cephalic version has been so long practised, it needs no explanation, but, in this country, where it has received so little attention, a brief examination of the different methods instituted for its accomplishment may not be out of place.

In giving cephalic version a prominent place in obstetric operations. it may be said, truly, that the old has become new, and, yet, the new differs essentially from the old.

From the time of Hippocrates, up to the announcement of Ambrose Pare, as an obstetrical reformer, cephalic version was deemed necessary in all presentations, except the head. In performing it, however, according to the plan of the time, much difficulty was encountered, and many lives were lost, consequently the active minds of the profession became busy in devising other modes of action. Pare enunciated the fact that he had tried podalic version, and found it more successful, and more easy of accomplishment, than the old method. His views and practice were adopted by other leading spirits, until finally they gained ascendency everywhere. Still, old prejudices, founded on personal success, remained here and there, throughout Germany, and, at length, men, such as are embraced in the article presented, abandoned podalic version as an exclusive method of converting unnatural into natural presentations.

The question arises, how was cephalic version performed in *thirty-four cases* of trunk presentations, and successfully to the child in *twenty-seven* of these cases? In the absence of any positive statement, it is to be presumed that it was by external manipulation, as this is now an established practice among German writers of distinction.

The method of performing cephalic version by external means, is not complicated, but often requires repetition and long continued perseverance, never forgetting that the uterus may be excited to premature or undue action by rough usage. It consists in apply-

ing the palm of one hand over the breech, and of the other hand over the head of the fœtus—and making pressure in such direction as is best calculated to rotate the entire body, and secure the vertex in position at the superior strait. All this presupposes the presence of the liquor amnii, the usual mobility of the fœtus, and the absence of uterine contraction. Again, the position of the patient should be favorable for relaxation of the abdominal muscles, and for the ready use of the hands of the obstetrician.

The article does not state at what time the enumerated mal-presentations were detected and rectified—whether between the sixth and ninth months of gestation, or not until labor had actually commenced. The latter period is most probable, for it cannot be supposed that 247,570 women were examined during pregnancy for no other purpose than to ascertain the position of the fœtus. Even Mattei, the enthusiastic advocate of cephalic version, by a dextrous use of the hands applied to the abdomen, during the latter months of pregnancy, could not be expected to engage in so delicate, universal and laborious a task. Every practitioner, whose mind has been directed to the subject, must be fully aware of the difficulty of ascertaining the true position of the fœtus, at any period anterior to the commencement of labor. The evenness of surface of the uterine globe, with firmness of the abdominal walls, and with an ordinary quality of liquor amnii within the uterus, may be assigned as reasons for this. The size and shape of the woman may be deceptive, either as to size or position of the fœtus. Fœtal motion does not define fœtal position, nor will the sounds of the fœtal heart afford satisfactory aid in diagnosis.

Were daily and universal examinations practicable, and could we detect and change presentations, at will, we may be excused justly from doing so, by the nonfrequency of mal-presentations, confining the modern views of unnatural presentations to the shoulder. According to Riecke, this presentation occured only "10 times in 220,000 labors in Wurtemburg." Drs. Johnston and St. Clair report its occurrence "twice in 13,748 deliveries in the Dublin Lying-in Hospital." Combining English and French statistics, we have presented to us *one* in about 208 cases.

While it is proper to lay down general rules for the management of a class of cases, there are individual cases admitting of special treatment. The instruction given by the early writers, to

change presentations not of the head, by seizing the head and pulling it down, or by rectifying obliquities of the uterus, to which wrong presentations were attributed, cannot be followed in all cases, yet, they may occasionally answer a good purpose.

Cephalic version, by external manipulation, has become a *general* rule in Germany. The plan I have adopted, combining internal with external action, an outline of which was given by Dr. Carson in the last number of the *Journal*, is being well established as a *general* rule, adapted to a greater variety of cases, and under more unfavorable conditions than any other. There are cases, however, in which the occiput may be found resting over the iliac line, and which may be made to occupy a favorable position at the brim by merely pressing the breach towards the centre of the uterus, or by the process adopted by Dr. Carson, in the case he has reported.

The article which has drawn forth these comments, cannot fail to convince those who have heretofore doubted, of the great value of cephalic version to the obstetrician, and in saving life.

Fatal Case of Chorea. By DAVID JUDKINS, M. D.

Geo. L. W., aged 17 years, apprenticed to the business of type-setting, was seized seriously on or about the 14th of February, with strong convulsions, and was at once placed in the charge of a homœpath; on the 21st of the same month, I was called to the case.

I found him lying upon his bed, requiring the full strength of three men, to prevent him from doing violent injury to himself: his whole muscular system was the seat of incessant clonic convulsive movements, which were so powerful, that in spite of the united effort of his three attendants, he would be dashed against portions of the bedstead, producing severe contusions of the head, face, superior and inferior extremities. His face had a dusky and bluish aspect; his eyes were injected; the pupils dilated. The globes of the eyes were involved in incessant movements—bi-lateral—and the eye-lids were in constant agitation. The convulsive movements seemed to commence in the muscles of the eye and face, and were thence distributed to all the other muscles of the body; but were more violent in the left lateral half, and he exhibited a strong tendency to roll over to the right. There was almost constant oscillatory motion of the head—the muscles of the thorax and

diaphragm partook of the disorder to such extent as to seriously impair the respiratory act—the action of the heart was intermittent, with exaggerated impulse. As far as could be ascertained, his intellect was not impaired; when, in his calmer moments, a question were asked him, he would manifest, by expression of face, intelligence, and evidently strive to reply, but this effort at volition would instantly throw him into violent convulsion. He could not co-ordinate the muscles necessary for the act.

The reflex act of swallowing could be performed, provided the drink or food could be conveyed into the pharynx beyond the control of the voluntary muscles. If a moment of calm were embraced to introduce food into his mouth, the slightest voluntary effort on his part instantly induced the wild disorder of the muscular system of animal life. He was allowed to inhale chloroform, which quickly suspended the terrible disorder, but of course this was but temporary, but cutaneous injection of atropia produced no marked effect.

Death took place by exhaustion, in about twenty hours from the time of my first visit—no post-morten examination could be had.

COMMENTS.—Fatal cases of uncomplicated chorea are rare, and this fact renders the case of Dr. Judkins the more interesting. Very few authors make mention of such a result from exhaustion of motor power. Romberg remarks, p. 66, 2d Vol., *Diseases of the Nervous System:* "Death rarely takes place in chorea from exhaustion resulting from the extreme consumption of motor power."

Dr. Aitken says he had an opportunity, when Pathologist to the Glasgow Infirmary, of examining a case of chorea, which terminated fatally after a most violent attack, the acute symptoms lasting ten days. Few details are given, but we infer death ensued from exhaustion. Of the post mortem appearance in the case, we will speak when the cases below have been mentioned. In Vol. IV, 2d series of *Guy's Hospital Reports*, 1846, is a "Digest of 100 cases of chorea," drawn up by Dr. Hughes, of the Hospital. It embraces a period of more than thirty years, and includes many cases, of which chorea was only a complication. Of the hundred cases, three were fatal. Only one of these is given in detail, and it was fatal from exhaustion in 40 hours after admission to the hospital. It had been under treatment about 14 days, and had no complication. The case seems to have been one corresponding in its symptoms

and course with Dr. J.'s case. The treatment consisted of sulphate of quinine and zinc in the beginning; towards the end morphine was given in a half grain dose without effect; wine was used freely; opium, 1 gr., was given soon after, with the effect of producing relief for ten minutes.

In Vol. I, *Guy's Hospital Reports*, 3d series, 1855, Dr. Hughes gives another Digest of 209 cases, with seven fatal, five of which were uncomplicated, and death ensued from exhaustion. Post-mortem inspections were made in all but one of these, and also in the one case detailed in the first series. Dr. Hughes sums up his conclusions, as to the 2d series, as follows: "The first circumstance that attracts attention in the preceding table, is the fact of all the five fatal cases of the disease, properly so-called, occurring about or past the period of puberty; and that, of the five, three were females and two were males. They all occurred within a space of less than three years."

"It may next be observed, that of the four cases examined after death, and actually dying from chorea, the brain was not found to be diseased in any one, and simply congested in two out of the four; and that, in but one out of the four was there observed any obvious or organic disease of the cord or of its membranes. In all of the four examined there existed disease of one or other of the valves of the left side of the heart. As to the abdomen, nothing in reference to chorea appears to be worthy of remark in any of the cases. The genital organs appear to have been excited unusually in three. Six days was the shortest period of duration.

Dr. Hughes has collected altogether, in two tables, eighteen fatal cases, of which two were not examined after death. "The ages of those whose decease resulted from chorea itself, excluding a child, aged 10, two aged 11, and including twelve cases, were all those of persons who were approaching to or had actually arrived at, or had passed the period of puberty, and varied from fifteen in the female to twenty-five in the male. Nine were female, and six were male, including the three children.

In reference to the morbid anatomy of the disease, as shown by the fourteen cases in which post-mortem examinations were made, the summing up is as follows: "Disease of some kind was observed within the cranium in ten cases, and the brain and its membranes were found quite healthy in four; in six of the fourteen cases the spinal cord was not examined; was, when examined, found quite

healthy in two, softened in two; and that it, or its membranes, were otherwise diseased, whether from congestion or adhesion, in four cases."

As to the chest, of sixteen cases examined after death, while suffering from chorea, the organs were not mentioned in two, were healthy in two, and more or less diseased in twelve cases; in eleven out of these twelve there existed a diseased condition of the sigmoid, or auriculo-ventricular valves.

Of the abdominal organs, in sixteen cases, those organs were reported healthy in four, the liver was large or congested in six; intestines congested in four; the kidneys in an abnormal condition in four, and the stomach ulcerated in two instances. Of the seven females who had arrived at, or near to the period of puberty, the organs of generation were not noticed in three; the ovaries were turgid and congested, or there was undue excitement in four cases.

As the post-mortem examination of the brain in Dr. Aitken's uncomplicated case was more carefully and minutely made, and more in accordance with the recent methods of investigation, than in the case of Dr. Hughes' summary, we give an abstract of its results. It showed decided change in the corpora striata and thalamis optici. "The specific gravity of the corpora striata and thalami optici was different on the two sides of the brain; those on the right side being 1.025, and those on the left 1.031. The vascularity, also, of these central parts of the brain, when compared with the gray matter of the spinal cord, which was healthy, was so well marked as to leave no doubt of its abnormal increase. Microscopic examination confirmed the existence of increased vascularity, for numerous capillary vessels, in abundance, existed in every section examined. Some of these were irregularly dilated, as in a varicose condition, and were filled to a greater or less extent with red corpuscles of the blood. The amount of granular substances in these parts of the brain, on both sides, appeared to be greater in proportion to the fibrous substance than in the same parts of the healthy brain with which I compared them." This case was fatal, after a most violent attack lasting ten days.

Luys, in his work on "*Recherches sur le Systeme Nerveux cerebro-spinal sa structure, ses Fonctions et ses Maladies*," Paris, 1865, speaks thus of the pathological anatomy of chorea: "It results indeed from a certain number of observations, that these peculiar motor troubles appear specially in cases where the net-work of pedun-

cular fibres (of the cerebellum) has been injured in its continuity, and when the region of cerebellar activity has been more or less directly involved. It is thus that lesions of the inferior peduncle at the point where they are flexed forward to form the gray substance of the bulbar region; those of the middle peduncles, at the point where their terminal expansions become the gray substance of the protuberance; those of the superior peduncles, at the point where, in intercrossing, they pass under the tubercula quadrigemina, are equally apt to produce choreal movements.

He refers in a note to "the remarkable work of Vulpian and Charcot on *Paralysis Agitans*," in which there is a series of anatomical, physiological and pathological proofs, designed to prove that the regions of the bulb and protuberance are the regions of the nervous system especially concerned in the production of choreal phenomena. On page 585 of his work are given four cases with post-mortem inspections, in which the above-named regions were variously diseased.

Dr. Hughes observes justly that "those who witnessed these cases, or who have witnessed other similar fatal cases of chorea, will, we think, agree with us, that trivial and almost laughable as it is in its ordinary aspect, chorea when of the severest character, is one of the most lamentable nervous diseases to which humanity is liable. Compared even with tetanus and hydrophobia it is in some aspects more dreadful. In those the spasmodic motions, though terrible, are at any rate intermittent. An interval of quiet and comparative ease exists, and the patient in the acute forms of tetanus and in hydrophobia, is ordinarily carried off suddenly in one of the paroxysms. But in chorea of an extreme and fatal character, not only are, during wakefulness, the spasmodic movements incessant, and the arms, legs and body, eyes, mouth and neck, in a continued state of contortion, twisting, turning and grimace, till the body becomes sore, the limbs bruised, and often excoriated; but an imploring, piteous expression exists on the countenance; the lips are bitten; the mouth bleeds; an occasional involuntary cry or squeak is heard, and the poor patient is, unless accidental complications occur, and they are not frequent, carried off by sheer exhaustion of the vital energies. We say this advisedly, after the observation of several cases, and with all deference, notwithstanding the opinion of Romberg to the contrary." Those who saw the case of Dr. Judkins, will be apt to concur in this expression and description.

In *Clinical Histories, with Comments*, by Dr. Day, London: 1866, p. 104, is given the history of a case of fatal chorea. It can not be called an uncomplicated case, for there was a predominant rheumatic element or influence. It occurred in a boy aged nine, who had had two years before acute rheumatism. He died on the sixteenth day of his attack "completely exhausted, though retaining consciousness almost to the moment of his death." The post-mortem account states "there was nothing about the brain and its membranes to call for particular notice." "The coverings of the spinal nerves, and the nerves themselves, presented the following singular appearances: Just at the point where the nerves are seen to emerge through the intervertebral notches, they seemed pinched, almost as if tied by a ligature, whilst at this spot their membranous covering was at least four times as thick as it normally should be, so that it appeared to form a complete stricture, whilst both before and behind this constriction there was ample evidence of inflammatory action."

The influence of syphilitic and rheumatic states, and the effect of lead-poisoning, in producing various nervous symptoms, are well-known. The possibility of the last condition having a share in the causation of chorea in Dr. Judkins' case, was spoken of by the Dr., and is worthy of consideration in connection with its history; but there was no time for the treatment appropriate to that state when he came into his care.

Dr. Day makes the following comments upon his case, p. 112: "Now between those cases of chorea which are so easily arrested, and those which are so refractory and fatal, there must be, of necessity, either the operation of some different cause, or the cause, if the same, must be modified by some peculiar conditions. To my mind the difference consists in this, that in the milder and more yielding forms there is mere functional disturbance, the result, most probably, of sympathy, without any active inflammatory action; while in graver attacks there is *always* going on a local lesion of a severe character. There has always been a very wide difference in the *kind* of spasmodic action in the two forms I refer to. In the milder and sympathetic state, the movements, although certainly spasmodic, have been grotesque in their manner, giving one a sort of feeling that they were rather exaggerated natural motions, with a shade of *controllability;* whilst in the severer forms all control is evidently gone, and the spasmodic affection seems to partake almost of the nature of tetanus." W. C.

Croup.—Translated from Niemeyer's Lehrbuch der Speciellen Pathologie und Therapie. By SAMUEL NICKLES, M. D.

[Continued from March Number.]

Symptoms—(continued.)—The circumstance that children frequently perish of croup who present, during life, the phenomena of extreme dyspnœa, but in whom, after death, neither pseudo-membranes, nor considerable swelling of the mucous membrane, or submucous tissue, is found, has been the occasion of the opinion that in these cases the narrowing of the glottis is due to a spasmodic contraction of the laryngeal muscles. This opinion, however, contradicts physiological and pathological facts: wherever we observe an intense inflammation of mucous or serous membranes, we find not only the submucous and subserous areolar tissue, but also the muscles covered by the inflamed membrane, pale and infiltrated with serum. It is, *a priori*, not to be supposed that muscles in this condition are capable of morbid contraction, and *Rokitansky* affirms outright, that the pale, relaxed, infiltrated muscular tissue in croupous inflammations falls into a state of paralysis. That muscles in this condition do indeed lose the power to contract, is shown by the intercostal muscles in pleurisy, which bulge out, because they are *paralyzed;* by the intestinal muscles in peritonitis and dysentery, diseases in which the peristaltic motion of the part of the intestine whose serous or mucous covering is inflamed, ceases, because the intestinal muscles lined by the inflamed membrane are *paralyzed.* These, and many other analagous observations, render it highly improbable that the laryngeal muscles, when covered by an intensely inflamed mucous membrane, should be, not paralyzed, but rather in a state of spasmodic contraction. That paralysis of the laryngeal muscles may produce dyspnœa, is shown conclusively by the section of the pneumogastric nerve, performed on young animals for quite different reasons; indeed, the dyspnœa arising in consequence of these experiments so exactly resembles that which we have described as belonging to croup, is attended with the same protracted whistling inspiration, etc., that the similarity of the two conditions must strike the unbiassed. But a consideration of the anatomy of the glottis in childhood, can leave no doubt that in all cases in which it is not actively expanded

during inspiration, by muscular action, it will be narrowed and closed by powerful inspirations. The triangular space which the base of the arytenoid cartilages incloses, by being prolonged forward and inward, is absent in childhood. The base of the arytenoid cartilages has in children no extension; the glottis forms from before backward but a small chink, bordered by the membranous expansions of the vocal cords. As these membranes are directed obliquely towards one another, the chink must become narrowed, and finally closed, if, during a forcible inspiration, the air in the trachea becomes rarefied, unless the glottis is simultaneously dilated by muscular action. In every larynx taken from the bodies of children, the glottis may be closed by strong suction exerted at the free end of the trachea.

As it is of the most vital importance in the therapeutics of croup, to decide whether the glottis is narrowed by pseudo-membranes, or whether paralysis of the laryngeal muscles, produced by œdematous infiltration, is the principal cause of the dyspnœa, we should carefully observe whether inspiration and expiration are equally difficult, or whether inspiration is laborious and whistling, while expiration is easy. In the first case, the glottis is narrowed by false membranes, and the entrance as well as the exit of the air is rendered difficult; in the latter case, muscular paralysis is the cause of the dyspnœa; the pressure of the air from the nasal and oral cavities closes the glottis during inspiration, if the air in the trachea becomes rarefied, but expiration remains unimpaired, because the expired air presses asunder the vocal cords, muscular action not being necessary for this purpose. Finally, let us remember that the crico-arytenoidei postici muscles, which produce the expansion of the glottis, are most easily paralyzed when the pharyngeal mucous membrane covering them is implicated in the inflammation. Hence it follows that those cases of croup—which alone the French consider true croup, those cases in which croup membranes are detected on the pharyngeal mucous membrane—are by far the most dangerous cases.

The wide gaping of the glottis during inspiration, when the laryngeal muscles act normally, which I have observed as often as I have applied the laryngoscope, since I first advocated that paralysis of the laryngeal muscles is the essential element of the dyspnœa of croup, has strengthened me in the conviction of the correctness of my theory.

It is difficult to decide whether actual pain in the larynx must be added to the symptoms described. The grasping of the throat may be owing to a desire to remove the obstruction, which the child instinctively knows to be in the throat. In the beginning of the disease, the scanty expectoration rarely contains ragged concretions or coherent membranes. The pulse is usually at first full, hard, and more frequent; the face flushed, and the temperature of the body considerably elevated.

In very many cases of croup, marked remissions, often approaching intermissions, occur in the morning and in the course of the day. Towards morning the breathing becomes easier, the voice returns, the cough recurs less frequently; it is hoarse, but not soundless, the fever abates, the general condition seems almost undisturbed, and only the fine whistling and the suspicious sound of the cough, remind one of the frightful scenes of the past night. We must be on our guard not to expect too much from the remissions; for with the succeeding night there may be a return of all the phenomena, placing the life of the child in the most imminent jeopardy. The continuance of the fever, however moderate, but above all the presence of pseudo-membranes in the pharynx, must give rise to great solicitude.

Sometimes croup presents this rythmical course during the whole of its continance; supportable days are followed by evil nights; until, if it terminate unfortunately, the remissions become shorter and more imperfect, and the nocturnal exacerbations produce greater dangers. In other cases, indeed in the most dangerous cases, the phenomena of croup have from begining to end a constant course. The remission expected in the morning does not take place, and the disease may terminate fatally in the course of the second or third day,

If the disease does not improve, but, as unfortunately occurs too often in the croupous form of laryngitis, tends to an unfavorable issue, the described phenomena will be changed. The reddened face of the child becomes pale, the lips colorless, the eye, which looked about, alarmed, has a sleepy expression; not unfrequently spontaneous vomiting sets in, whilst administered emetics are ineffectual, and the child becomes insensible to sinaprisms and other cutaneous irritants. The respiration becomes shallow, and with this even the whistling sound of the inspiration frequently ceases; the child lies exhausted in an uneasy slumber; the symptoms of

croup seem to have disappeared; the child appears to be free from dyspnœa, until after awaking from its slumber; or after having coughed, it involuntarialy tries to breathe deeply, then the glottis closes; the child, in danger of suffocation, jumps up, supports itself with its arms, looks about despairingly, renews its forcible efforts to inspire deeply, finally falls back exhausted, and again slumbers. (The same phenomena are observed in young animals whose pneumogastric nerve has been cut; respiration quite easy, when shallow; but extrmely difficult as soon as they endeavor to inspire deeply.)

These changes, which take place in the condition of the child during the progress of croup, are owing to the gradual *poisoning of the blood with carbonic acid*; and from the overloading of the blood with this gas arises chiefly the danger of this disease. It is by no means the congestion of the brain and its membranes, as is generally assumed, from which the phenomena described are to be deduced, quite as little as croup patients exhibit a cyanotic appearance, when they do not cough and compress the contents of the thorax, and thus restrain the emptying of the jugular veins. All croup patients, as long as the inspiration is difficult, *must* be pale, and, indeed are pale, until, from commencing paralysis of the heart, the arteries contain less and the veins more than the normal amount of blood, imparting a livid hue to the lips.

The blood in the veins of the thorax is under less pressure than the blood in the veins external to the thorax, as the elastic lungs have a tendency to contract, so as to occupy a smaller space, and thus to expand the vessels in relation with them. If this suction-power is increased by every deep inspiration, augmenting with the expansion of the lungs, it must attain the very highest degree, and the blood in the veins external the thorax must be drawn into the chest with great force, whenever a patient with contracted glottis endeavors to inspire deeply, and thus *rarefies the air in the lungs*. A cyanotic condition, or an interception of the flow of blood from the cerebral veins, can never result from this process; it must always produce the contrary effect.

As the interchange of gases in the lungs depends especially on the renewal of the air in the cells, the blood parting with carbonic acid, and receiving oxygen only on the condition that the air in the cells contains less carbonic acid, but more oxygen, than the blood of the surrounding caprillaries, it becomes a necessary

consequence of the imperfect breathing in croup, of the imperfect renewal of the air in the cells, that the carbonic acid unceasingly formed in the blood cannot escape into the air of the cells already impregnated with carbonic acid. The symptoms described *exactly resemble* those which result from the inhalation of the vapor of burning charcoal. In croup, one is poisoned by the carbonic acid *produced in the body;* while in the latter case, the poison is inhaled with the air.

The condition of the circulation is different when the inspiration and expiration are equally obstructed. If the glottis is so much narrowed by false membrane that only very little air can enter into, and escape from, the lungs, and if now the inspiratory and expiratory acts are executed with all the means at command, the influence of the forced expiration, as the power of expiration is greater than that of inspiration, will preponderate over the influence of the forced inspiration on the passage of the blood into the thorax, and a cyanotic condition will indeed result. Should tracheotomy be performed in this stage, peculiar difficulty will be presented by the distended veins of the neck.

By far, in most cases which prove fatal, death takes place under the symptoms described, from gradually increasing general paralysis, the result of poisoning with carbonic acid. The access of air to the lungs is suddenly cut off, in some rare cases, by the loosened membrane falling upon the glottis, death of course resulting rapidly from suffocation.

Should croup terminate favorably, improvement will generally be gradual; a tough expectoration more or less copiously mixed with coagulated flakes, is from time to time expelled, the cough becomes easy, the voice louder, the symptoms of narcotism disappear, while the breathing becomes freer and more perfect.

But in other cases, which are by far less frequent than is usually supposed, large quantities of pseudo-membranes or even cylindrical formations, are expelled by retching and vomiting, and the breathing, extremely laborious until now, is suddenly much easier; the children are rescued from the perils of death, if a subsequent exudation does not again close the glottis, or exacerbation of the inflammation does not excite anew œdema of the laryngeal muscles.

Many children, on the expiration of the croupous process in the larynx, after it has continued for some time, perish from hyperæmia and œdema of the lungs, and from intense bronchitis.

The proportionally unsuccessful results of trachoetomy in protracted cases of croup, depend simply on this complication, the frequency of which can readily be shown to be a necessary consequence. When the thorax expands and the air-cells augment in circumference, while air can not enter them in proportion, the air contained in the cells and bronchial tubes must be expanded, rarefied; the state therefore of the lungs and bronchial mucous membrane, in croup, is like that of the external integument upon which cups are applied; hyperæmia and increased transudation are the necessary results of the total or partial removal of the pressure from the walls of the capillaries.

[TO BE CONTINUED.]

Resume of the Gulstonian Lectures. By REGINALD SOUTHEY, M. D., Oxon. F. R. C. P.

Dr. Southey first pointed out that the original meaning of the word tubercle was simply a swelling, but that the term had gradually come to be applied to one particular kind of swelling, and thence to the substance producing it, though this substance did not in all cases produce intumescence. This substance, though ordinarily reckoned to be of one kind, was not so in reality; for what was now called tubercle was by no means identical in all cases. With regard to its origin, some supposed it was an exudation; others a metamorphosis of pre-existing tissue; others still, of the Berlin school, supposed it was a direct growth, entirely a new formation; while a fourth school held that the substance was a precipitate of lymph. Dr. Southey said that the three different kinds of tubercle ordinarily recognized had far better be separated, seeing that their common name implied that they were of the same kind, which is very far from being the case. Carswell saw this difficulty, yet declared that neither color nor form was useful in classifying the different kinds of tubercle.

Inquiring into why dissimilar forms ever came to be associated together, Dr. Southey referred first of all to the views of Rokitansky, who held that a dyscrasic condition of the fibrine of the blood was at the root of the formation of tubercle in all cases, and that this furnished the connecting link between the three kinds recognized by him. Lebert, again, held that all kinds of tubercle were

characterized by one common feature—a peculiar kind of cell; to which, however, no such specific value can fairly be attached, since it is a product of late formation in the degenerative stage, and quite undistinguishable from an ordinary compound granular corpuscle. Virchow held that tubercle was a new growth, allied to connective tissue, whence it was derived and in which it was always found; and that it was characterized by no single element, but rather by the whole assemblage of these and the method of their association. According to this observer, there are two forms, the *cellular* and the *fibrous*, the latter of these differing from the former chiefly through the accident of its position. The cellular variety is best seen on free surfaces, where it is more or less oviform; the fibrous in dense structures. Abnormal growths continue longest in their stages of growth and decadence; normal in the stage of maturity. Tubercle can be affirmed to attain permanence in both the first and last of these states—the fibrous form in the embryonal, the cellular in the necrobiotic. Tubercle, in its typical or cellular form, is seen to greatest advantage in the fat cells of the omentum. It is heterologous by descent, proceeding by endogenous proliferation out of the connective, or rather some embryo connective tissue cell, and altogether heterotopic. It is organized, but not highly; and as to its characters, these must not be read from the stage of detritus, in which they are altogether obliterated. The typical form of tubercle can usually be best seen in tubercle of the meninges, where it seldom exceeds the size of a pin's head. As to form and shape, these would vary with situation, but it might be said that the fibrous form of Virchow corresponded with the infiltrated tubercle of the older writers. As to its origin, the shedding of cells into the fluid bathing the new tumour, had given rise to the idea that they originally existed there, and were subsequently deposited in the tissues. The tendency of tubercle, Dr. Southey said, was to fatty degeneration, but this differed from that usually seen affecting the organs of the body, the cells diminish in size, and the oil does not run into globules inside them. Moisture was deficient; hence the tendency was to produce a cheesy, friable mass.

With regard to the progress of tubercle, when superficial, as in the larynx, it was very rapid; after this came the bladder; and, strange to say, as moisture was the great thing necessary for the disintegration of tubercle, bone was third in the list. Dr. Southey then described in a most perspicuous manner, the progress of

tubercle in other organs of the body, as in the brain, the kidney and the liver, and in its mixed form with ordinary hyperplastic fibrous tissue in the mesentery; he further showed how it never implicated cartilage, except by secondary interference with its supply of nutrition. He finally insisted on the importance of not confounding phthisis with tuberculosis, which was too frequently done, and urged that the former disease was often due to other causes, as chronic pneumonia, scrofulous ulceration, and simple abscess only in a particular tissue. The whole lecture might be looked upon as an amplification of the views originally brought forward by Virchow, and will, we doubt not, tend to bring these into more general favor.

In his second lecture, Dr. Southey proceeded to point out how, long ago, tubercle was supposed to be secreted by the glands, and that, curiously enough, the most recent opinions tended to place it among those tumors which resembled imperfectly formed glandular tissue. For a long time tubercle was confounded with the white cells of the blood; but when found in the walls of a blood-vessel, it had been supposed to originate from the granular layer of the external covering of these. The theory of a blood dyscrasia was at the foundation of all theories of tubercle, but in its history it was better to begin with the substance itself. This substance must be considered as distinctly heterologous, seeing that it originates in cells (mostly connective-tissue cells) entirely different from those which constitute its own structure. Cells might be described as originating in two ways: by cell division—*i. e.*, cleaving of the whole body, both periplast and endoplast—or by endogenous formation, when the endoplast alone divides, the periplast not sharing in the process. By the former mode homologous growth is effected, the new cells in every way resembling their parents; by the latter, heterologous formation results, as the cells might differ to any extent from their progenitors. In the latter way tubercle and cancer originate; therefore both are heterologous, consequently resembling each other in this and other respects. Thus both are accompanied by constitutional dyscrasia; both have sites of proclivity, both are hereditary, both tend to spread and ulcerate. They differ, however, in as far as cancer can grow, while tubercle has no independent power of maintaining itself. Rokitansky thought that the one excluded the other, but this is not exactly correct.

As a tumor, tubercle is of a lymphomatous nature *i. e.*, one having its type among the normal structures, in ductless glands, as those of the intestines and the lymphatics. Tumours of this class are of two types—one hyperplastic, that is, simply excessive formation of normal elements; the other heteroplastic, whose constituent cells differ from their progenitors. To the latter type tubercle belongs. First among lymphomatous tumors comes the leukæmic lymphoma, the enlarged condition of the glands seen in leucocythæmia—really the cause, not the consequence, of the latter disease. Next comes typhoid lymphoma—the condition of the glands, especially of the intestine, in typhoid fever, and in which, as they tend to become caseous, there is an approach to tubercle. Hence, also, acute general tuberculosis might be, and often is, confounded with typhoid fever. In scrofuloid lymphoma, the next variety, the new formation is no longer of a simple hyperplastic nature; anatomically, it is related to tubercle, and might be seen in syphilitic subjects. In lympho-sarcoma there is a sarcomatous enlargement of the glands, with a scrofulous diathesis. The new formation is gray or ashen-hued, the glands are larger than in scrofula, and they seldom ulcerate or become caseous. The cervical and bronchial glands are most frequently affected in this manner. Turning to scrofula, the build of body serves to distinguish its diathesis from that of tubercle. Scrofulous people are largely and heavily built; their complexions are muddy; generally they are torpid. Those, again, with a tendency to tuberculosis are tall and thin, with small heads and muscles and fine hair, and are unusually precocious, nervous, quick and irritable. In scrofulous constitutions there is a tendency to chronic inflammation of an unhealthy character, whilst the tuberculous habit has a tendency to one special disease only. The transition from ordinary to scrofulous disease is by insensible gradations, and the whole tendency of the condition might be summed up in its producing an excessive *vulnerability* of body.—[*Medical Times and Gazette.*

On Rigid Perineum. By Dr. Beatty. From *Dublin Journal of Medical Science*, July, 1857.

The management of the last part of the second stage of labor is often attended with difficulties that demand the utmost care, and

are productive of serious anxieties in the mind of the individual charged with the conduct of the case. This remark applies more particularly to the phenomena of parturition in primpara; though, at times, circumstances of a similar nature are found to create embarrassment in those who have already borne a child at the full period.

All persons who have been any time engaged in the practice of midwifery, are well acquainted with the tantalizing torments of a rigid perineum. Hour after hour the attendant sits by the bedside; every pain distending the soft parts seems destined to be the last; the structures, strained to the utmost, seem incapable of further resistance, yet they do resist, until finally a rent at the fourchette takes place, most commonly to a small extent, sometimes to a more considerable one, and the head of the child escapes from the pelvis. In many cases of moderate rigidity, the delivery is accomplished without any rent; but in the more obstinate cases, the greatest amount of care, exercised by the most skilful hand, will fail to prevent some amount of laceration. A knowledge of this fact should lead us to be very cautious in dealing with the reputation of the attendant who has had the misfortune of having such a case under his charge. Every man in practice is likely to encounter such cases, and in some of them no man can prevent the accident. In speaking of this subject, Dr. Denman makes the following remarks:—"That some degree of laceration should sometimes occur will not be surprising, if we consider the great change and violence which all those parts sustain at the time when the head of the child is passing through them, or that when a laceration begins it should extend through a part rendered at that time extremely thin, and suffering an equal degree of force. When the the perineum is indisposed to distend, or if, when distended, it cannot permit the head of the child to pass with facility, the anterior part of the rectum is dragged out, and gives to the perineum a temporary elongation. The true perineum, and the temporary, as it may be called, thus forming an equal uninterrupted space; if a laceration should commence at any part, it might, without the greatest care, extend through the whole.

"That kind of laceration of the perineum which commences at the anterior edge, and runs obliquely or directly backward, is alluded to in every dissertation on this subject. But there have been many instances of another kind of laceration, which may be called

a bursting or perforation of the perineum at that part which is connected with the circumference of the anus, when the anterior part is preserved, and through such perforation, it is said, children have been sometimes expelled."

A remarkable case of this kind occurred in the practice of the late Dr. Beatty, in the year 1808, from whose case-book I now quote it: —"October 17th, 1808. I saw this patient in labor with her first child, about seven o'clock in the evening, after having had slight pains during the day with very little effect on the os uteri. I saw her again 10½ P. M., when the progress of labor appeared to be slow. While I remained with her the pains became more frequent, and in a very short time the head rested on the perineum; but what appeared strange to me was, that though the pains continued to be very severe, and the tumor caused by the head distending the perineum to increase, there was not the slightest dilatation of the os externum beyond its original size. In about an hour the head of the child was entirely expelled from the bony pelvis, and the external parts formed a bag or cap for it, which was forcibly distended at every pain. My fears for a laceration now increased so much that I thought it necessary to explain them to an intelligent woman who was with us, and to make her examine the parts, that she might be convinced of the impossibility of preventing it; at the same time I used lubricants, to satisfy the friends that I would do everything in my power for my patient. At length I found the perineum begin to chip or crack at the prominent part, and soon after give way to such an extent that the child was passed through the aperture, though it did not communicate with the os externum. The placenta was delivered through the same passage; and when I told the lady that she had had the most painful labor I had ever met with, she said she expected such, from a contraction which had taken place iu those parts when she was young, after a fever, a contraction which had almost prohibited coition.

"The os externum had left an oval mark on the child's head, which I measured, and found to be 2½ by 1¾ inches, and which was the full extent to which the vulva would yield.

"October 28th—this day examined the state of the parts, and found both the sphincters of vagina and anus entire and undisturbed, and the rectum uninjured. The patient was able to walk a little through her room. The wound was in a healthy state, and likely to heal."

But such an accident as this is not the worst that occurs under simliar circumstances. A more frequent result is the extension of the rent, commencing in the middle and most prominent part of the distended perineum, and its prolongation through the sphincter ani behind, and the vulva before, thus throwing the two passages into one, and entailing the misery of uncontrolled defacation upon the unfortunate patient.

As I have already said, no amount of the most careful attention on the part of the medical attendant can prevent some of these extensive lacerations at times. The split will begin either in front, and run back to the anus, or into it; or it may begin in the middle and embrace both sphincters before it stops; or the head may come through the rent in the middle, and leave both sphincters untorn. In whichever of these ways the struggle terminates, the result is very calamitous, and entails a vast amount of suffering on the patient, and of trouble to the attendant in whose hands the accident has occurred, to whom the patient and her friends will attribute all the blame. These cases are, in the present day, not so lamentable as they were formerly, for plastic surgery and wire sutures enable us now to remedy the evils in a manner that would astonish our forefathers. I look back with regret to the case of a most interesting, very handsome patient, twenty-five years of age, the wife of a cavalry officer, that passed through my hand thirty years ago. I was engaged to attend her with her second child, and when her labor began I was surprised to find the perineum split into the rectum. I learned that this had happened in her first confinement, which took place before she came to this country, and, as usual, the strongest invectives were heaped upon the head of the unfortunate doctor who had attended her. Her second labor, I need not say, was easy enough, and I saw her for a long time after her recovery. But her life was miserable; she could not venture into society, for she was unable to control the passage of feces or of flatus from the bowels, and she never knew when one or the other would escape. If I then knew and could have done what I now know and can do, I would have been able to restore that young creature to health and comfort, and to that position in society which she was intended to adorn. I think it is extremely probable that cases like this are more numerous than is generally believed. Until very recently, it was too well known that nothing could be done to relieve them, and unfortunate sufferers bore their misery in silence, not wishing, naturally enough,

to make known their infirmity when of such a disgusting and incurable a nature. Since the means of remedying the evil have been devised and successfully practised, the number of cases that seek relief has wonderfully increased; and in the last edition of Mr. Baker Brown's work on the surgical diseases of women, he gives the details of no less than 112 cases in which he has operated. When such a vast number has fallen to the lot of one surgeon, we may have some idea of the multitude that must be scattered over the empire.

Seeing, then, that extensive laceration of the perineum is of sufficiently frequent occurrence to arrest the attention; and knowing, as we do, that at times the most skilful care, as at present practised, is impotent to avert the calamity, it behoves us to inquire more particularly into the nature of such cases, and ascertain the cause of the accident, with the view of discovering some means of preventing it, more effectual than those in ordinary use. When we look back on our own experience, and read the accounts of such cases in authors who have treated the subject, we find that the condition of the parts for some time preceding the rupture is as follows:—The head of the child has escaped from all bony resistance, and is well out of the pelvis, carrying the perineum and anterior wall of the rectum before it, these parts forming a cap or bag in which the head lies. The vulva, however, remains undilated, the efforts of the uterus seem unavailing to cause any extension of that opening, and the head, which in the earlier stage of this part of the process had been driven against it, has now, by the yielding of the perineum, sunk below its level; and every pain drives it lower, so that all the force is expended in an endeavor to tear through the bag in which the head is embraced. The soft parts finally give way, often in the middle, most prominent part, and the rupture is effected. The term, rigid perineum is, in fact, hardly applicable to these cases; it is the vulva that is rigid, and its resistance that causes the mischief. It is unyielding of the vulva that is the immediate cause of the danger.

Let us now turn to nature's book, and inquire what means she adopts to escape from the difficulty in cases somewhat less exaggerated than those I have just described. In minor degrees of rigid vulva the head is enabled to take a more forward course, a greater amount of it is permitted to emerge at each pain, but the tissues will not or cannot yield sufficiently to permit the head to pass

through; the opening must be enlarged before delivery takes place, and accordingly in a vast number of such cases, it is notorious that some fibres of the fourchette give way, and immediately the head is expelled. A great deal may be done by carefully supporting the perineum to prevent this rent going too far, but no amount of care will prevent some laceration in many of these cases. Nature I believe to be a very good doctor, and often accomplishes her ends better than the best of us, and moreover, often points out to us the right way to help her out of difficulties, if we study her proceedings, and are not too proud or too timid to imitate her.

The following case will show what can be done by taking nature for a guide:—

On the 14th of November, 1866, a remarkably fine, well-made lady, twenty-five years of age, and just nine months married, took labor at 2 o'clock A. M. I was sent for, and saw her at 8 o'clock, A. M., at which time the head of the child was well down through the pelvis, and nearly rested on the perineum. The head was covered by the still undilated uterus, the os uteri being the size of a two-shilling piece. The vulva was very small, but did not then seem rigid. The pains were natural, the os slowly dilated under their influence, and in another hour, at 9 A. M., it was fully open, and the head distended the perineum at every pain. I looked forward to a speedy delivery, and took my place by the bedside. The head came lower and lower, pushing the distended perineum before it, and at each pain a small portion of a very hairy scalp was protruded through the vulva. In this position I remained from 9 A. M. to 2 o'clock P. M., just five hours, during which time the pains were increasing and more violent, distending the perineum to a frightful extent. I wished to give her chloroform, but she refused to have it. The perineum seemed like a bag into which the head was driven with every intention to tear through it. The soft parts over the head, from the edge of the anus to the fourchette, measured nearly 3½ inches; the anus was distended at every pain, showing fully an inch and half of the interior of the rectum. During the whole of this time there was no further dilatation of the vulva, and no advance of the head forwards; the whole force of the uterus seemed to be directed towards driving the head either through the perineum or through the rectum. It became quite manifest that one or other of these must occur, for there did not appear to be the least chance of the head escaping through the vulva. When mat-

ters were in this state, at the end of five hours most desperate struggle, I argued with myself, that if nature so often puts an end to such difficulty by the yielding of the fourchette and anterior fibres of the perineum, the best way to rescue my patient from the frightful laceration that was so impending, would be to imitate nature, and enlarge the opening of the vulva. Accordingly, seizing the moment when a furious pain, that almost drove the head through everything, had subsided, I introduced one blade of a probe-pointed scissors between the perineum and the head, and divided an inch of the soft parts. The very next pain passed the head out through the vulva with the greatest ease, without a single fibre being torn, or the slightest extension of the opening I had made. The recovery was perfect. No treatment beyond ordinary washing was adopted for the wound, which healed spontaneously, so that the nurse in attendance remarked to me some days after, that I ought to have taken measures to prevent its healing so well, for there would be the same trouble at her next labor. By this simple imitation of what nature so often does I terminated a most difficult and perilous labor, without the slightest ill result to the patient. I find, in two recent authors, allusions to an operation similar to that which I have just described. Doctor Hall Davis, in his very excellent work,* says:—"In organic or structural rigidities due to hard cicatrices from former sloughings, sometimes depending upon plastic operations extended too far forward to admit of the exit of the head, these means (chloroform, warm fomentations, unctuous applications, and warm water enemata) may fail. In two cases, last year under my care, such cicatrices were the obstacles, and not yielding to chloroform, in one a rent was inevitable, which, however, left an adequate perineum behind. In the other case, rupture being expected every moment, I summoned the surgeon who had operated, and suggested his making a slight bilateral incision downward, and outward to the extent of a quarter of an inch. This sufficed, and the child, living, immediately passed out without any extension of the incisions, which had healed in two days afterwards; thus the perineum was saved." In the last edition of the highly valuable work of Mr. Baker Brown,† he observes:—"In cases where rupture seems inevitable during delivery, Dr. Blundell recommended and practised the plan of relieving the

* Parturition and its Difficulties.—p. 13. 1865.
† Surgical Diseases of Women.—p. 10. 1866.

tension of the perineum by a slight lateral or oblique incision during a pain, thus actually producing a laceration, but one of no moment, if it serve as intended, to prevent the tear along the median line, where it naturally takes place, and proves of serious consequence. This plan I concur with, and would practice when chloroform failed or could not be administered. MM. Paul Dubois and Chailly-Honore advocate an oblique incision of the vulva toward the perineum about a third of an inch long, either to prevent altogether the rupture of that region when much distended, or when the laceration is unavoidable, to favor it at a spot where it may produce the least mischief. The writers support their views by the history of successful cases." Since reading the above quotation I have searched through Dr. Blundell's work, and not finding any allusions to the operation in question, I inquired from Mr. Baker Brown, and he has kindly informed me, that he attended Dr. Blundell's lectures, and heard him advocate the proceeding.

I am quite sure that none of the members of the society will imagine that I undervalue the well-known means so advantageously employed to induce relaxation of the perineum and vulva, such as bleeding, antimony, chloroform, warm fomentations, and lubricants, or the protection to be obtained by careful support of the perineum; my object in this communication is to impress upon them, that in extreme cases, such as I have described, after all ordinary means have failed, and frightful injury is impending, a simple operation in imitation of what nature does will avert the danger, and place the patient and her offspring in safety.—[12*th January*, 1867.

On the Diagnosis of a Scrotal Tumor. By Mr. THOMAS BRYANT. From Guy's Hospital Reports. Third Series. Vol. XI.

In the following chapter I propose to consider the subject of diagnosis of scrotal tumors, as a whole; to describe the train of thought, as it passes through the surgeon's mind, in his attempt to diagnose a tumor of the testis; and to point out the special symptoms, or their combination, as they tend to indicate the presence of any special affection. Fully recognizing the great difficulty so frequently experienced in forming a positive opinion as to the nature of a scrotal tumor, I believe that a near approximation to truth

may generally be made when the history of the case, and its special symptoms are carefully weighed, and I am not disposed to place among the impossible the diagnosis of a scrotal tumor, because occasionally, great difficulty may be experienced, or it may be beyond our power to form any positive opinion upon the point. There are gradations of probability in all our conclusions as to the diagnosis of any disease, a certainty untainted by fallacy or doubt, rarely being obtained; and, I take it, we are as often correct in our judgment of the scrotal tumor as we are of any other affection.

The first point the surgeon has to decide, on being consulted as to the nature of a scrotal tumor, has reference to the question of hernia. Is the tumor connected with the testicle? or has it passed down the direction of the cord, from the abdominal cavity? Should the surgeon be able to isolate the growth, at its neck, from the abdominal cavity, by the thumb and finger, the question is at once decided, for almost all scrotal tumors can be so isolated, it being quite exceptional for any to pass up the cord so far as the internal ring; rare cases of vaginal hydrocele, or hæmatocele, in which the tunica vaginalis is open up to the internal ring, forming the exception.

This important preliminary point having been decided, the nature of the growth claims our attention next.

Is it a hydrocele or hæmatocele? Is it the product of inflammation or of tubercular disease? Is it a new growth altogether, and if so, is it innocent in its nature, or malignant?

Should the tumor prove translucent by transmitted light, the existence of a hydrocele may fairly be decided, although the form of this affection may yet be doubtful. Is it an ordinary vaginal hydrocele, or is it encysted? Should the tumor be large, even, and pyriform, and should the testis be found, either by means of manipulation or by the opacity displayed at one spot on transmitting light—at the posterior part of the tumor—vaginal hydrocele may suspected; but should the testis exist in front, or at one side, and should the tumor be small, and have been of very slow growth, and should it be more or less globular, or evidently multilocular, a cystic hydrocele may probably be diagnosed. The tapping of the tumor will, however, settle the diagnosis; for in vaginal hydrocele the fluid will be more or less straw-colored and albuminous; in the encysted, it will be thin, non-albuminous, pale, and probably opal-

escent, containing, on microscopical examination, granules and spermatozoa.

The presence of hydrocele is thus readily decided in the majority of cases, but in rare or old instances, the tumor is, at times, opaque, thus complicating the diagnosis. The history of these cases will, however, tend to throw much light upon the point, for it will, to a certainty, reveal a disease of very long standing; the tumor will be probably painless and fluctuating, and the testis will be made out in its usual position at the posterior part of the sac. Should a doubt exist, a puncture with an exploring trocar and canula will decide the question, for, in those cases, fluid will be drawn off, of a dark color, loaded with cholesterine.

We will now pass on to the consideration of tumors which are not translucent, and not hydrocele, and it is here that the surgeon experiences true difficulty in his diagnosis, for almost all the diseases of the testis are insidious in their growth, and most are painless in their development. The hæmatocele usually follows upon some strain or injury, and increases with tolerable rapidity up to a point, this change being accompanied with pain which soon subsides; it then becomes stationary as to size, and remains torpid for a variable period, when pain again appears, with other signs of inflammation. The presence of the testis is also to be made out by manipulation toward the posterior part of the organ. The surface of the tumor is always smooth, more or less oval or pyriform, and semi-elastic, or fluctuating.

The inflammatory affections of the testis have a peculiar shape, being laterally flattened; they are usually accompanied, at some period of their course, with tenderness and pain, and often associated with fluid in the tunica vaginalis. In the syphilitic inflammation, this fluid is often copious. Both organs are also generally involved, either together or at different times. The tumor is usually somewhat tender to the touch, and has a firm, fibrous feel, unlike the semi-elastic and half-fluctuating sensations given by cystic or carcinomatous disease. In very chronic cases, the testis, may, however, be perfectly painless, and will allow of any amount of manipulation, without distress; the natural testicular sensation will, also, have disappeared. In syphilitic disease, the surface of the tumor will probably be irregular, with firm fibrous outgrowths in different parts, and in the tunica albuginea.

In the tubercular affection of the epididymis or testis, there

should not be any difficulty in the diagnosis, for the tubercular deposit, as a rule, takes place unaccompanied with any pain, or any symptom beyond that produced by its deposition. When deposited in masses,—its usual manner—it feels like some foreign body introduced into the body of the gland or of the epididymis; it is at first quite painless, and unproductive of any symptoms, these only appearing when the material begins to soften down, and excite some inflammatory action in the parts around. This tubercular material may be deposited in one or more masses, subsequently, perhaps, coalescing into an irregular induration. When suppuration takes place, the diagnosis is complete.

The cystic or simple tumors of the testis are painless from the beginning, painless as growths, as well as on manipulation, and are to be recognized by purely negative symptoms. They attract the patient's observation only from their size; can be handled without exciting pain, and are usually free from even the natural sensation of the organ upon pressure. They are slow in their growth, uniform in their outline, and more or less globular; are always confined to one gland, rarely accompanied with fluid in the tunica vaginalis, and, on being punctured, emit only a more or less blood-stained glairy mucus.

The cancerous tumors of the organ are more rapid in their development than the cystic, a year's growth, as a rule, giving a large tumor; they are likewise painless, and readily allow of free manipulation. The natural sensation of the organ, also, soon disappears. They are unaccompanied with a hydrocele, and also involve only one organ. They have a more elastic and fluctuating feel than the cystic and the inflammatory enlargements, and when their outline is unequal or bossy, the projection is generally softer than the other portion of the tumor. An exploring needle, or trocar and canula, rarely, if ever, reveals the mucoid fluid, so characteristic of the cystic or simple affections, but usually lets out blood, or the thin, creamy fluid so characteristic of a cancer. In the following table the chief points of difference in the several chronic affections of the testicle are clearly shown. I sketched it, years since, for my own purpose, and, having found it useful, think it probable others may do the same in its improved condition.

Table of Diagnosis of Chronic Disease of the Testicles.

SYMPTOMS.	HYDROCELE.	HÆMATOCELE.	CHRONIC ORCHITIS.	SYPHILITIC ORCHITIS.	TUBERCULAR DISEASE.	CYSTIC, OR ÆDENOID DISEASE.	CARCINOMATOUS DISEASE.
Condition of tumor,	Tense, usually transparent, fluctuating,	Tense and elastic; *not* transparent; *obscure* fluctuation,	Firm, and not elastic; *not* transparent; not fluctuating unless complicated with hydrocele,	Very solid, but not elastic or transparent unless complicated with hydrocele, which is very general,	Indolent indurations in body of gland or epididymis, like foreign bodies. Towards the end these bodies soften and excite suppuration,	Firm and elastic; insidious enlargement of gland; not translucent; indistinct fluctuation,	A tense and firm enlargement of body of testis; not translucent. Indistinct fluctuation towards later stage; bossy outline; parts softer than others,
Outline,	Smooth and uniform,	Smooth and uniform,	Smooth and compressed laterally,	Irregularly nodular and very hard,	The epididymus the most frequently involved,	Generally regular, smooth and elastic; rarely bossy,	——
Position of testis	Posteriorly in *vaginal*. In front, or at side, or below in *encysted*,	Posteriorly,	Evidently an enlarged testis,	In tumor,	In natural position often half surrounded by epididymis as a half crescent.	In tumor,	In tumor,
Testicular sensation,	Present on manipulation,	Present on manipulation,	Present at first; absent after long existence of disease,	Absent altogether, except in very early stage; returns also towards convalescence,	Present,	Present at first, but soon lost,	Soon disappears,
Rapidity of growth,	Gradual, most so in *encysted*.	As a rule sudden, and after accident, at times spontaneous,	Slow,	Slow in the extreme, often hardly noticed,	Slow at first; rapid afterwards, when softening and inflamed,	*Unequal;* slow at first, more rapid afterwards,	Rapid, as a rule; slow only in the carsinoma fibrosum, which is very rare,
Size,	To great dimensions in *vaginal;* moderate in *encysted*,	Moderate,	Rarely more than three or four times natural size,	Moderate,	Moderate,	Rarely, but sometimes very large,	Sometimes very large,
Form,	Pyriform or oval in *vaginal;* globular in *encysted*,	Pyriform or oval,	Oval with flattened sides,	Irregularly oval and lumpy,	Lumpy; uneven in all its stages,	Oval, with flattened sides. Smooth at first, subsequent bossy,	Globular or pyriform; Smooth at first, subsequently lumpy, softest at these points,
Pain,	Very slight, if any, except when complicated with inflamed testis, and in acute hydrocele. Not increased on pressure	Painful at first, and at a later stage; not so during the intermediate,	Dull pain, increased on pressure, except in very chronic disease,	Very slight, allows rough handling. Towards end of disease, on recovery, pain on pressure returns,	Very slight pain or tenderness, except when pressed hard or inflamed,	Slight when present; generally painless even on manipulation,	Very slight even on free manipulation

Table of Diagnosis of Chronic Disease of the Testicles.—CONTINUED.

SYMPTOMS.	HYDROCELE.	HÆMATOCELE.	CHRONIC ORCHITIS.	SYPHILITIC ORCHITIS.	TUBERCULAR DISEASE.	CYSTIC, OR ÆDENOID DISEASE.	CARCINOMATOUS DISEASE.
Manipular indications,	Like fluid, vibrates on palpation,	Firm and solid,	Firm and solid, unless associated with hydrocele,	Very hard and irregular outline. Often hydrocele with small fibrous bodies in tunica albuginea,	*At first* as if foreign bodies existed in the parts, lumpy. *At last* soft before suppuration,	Firm and elastic, more so in one spot than another	Firm but elastic; softer on the bosses, when present,
Seat of its commencement,	In *vaginal*, at the lower part of the tumor. In *encysted*, at the upper,	—	Evidently in body of gland,	Always in body of gland,	Generally in epididymis; occasionally in body of gland.	In body of gland,	Body of gland,
Cause,	No recognized cause,	An injury or strain, rarely spontaneous,	Injury; or idiopathic,	Constitutional syphilis, hereditary or acquired,	Tuberculosis.	Unknown,	Unknown; occasionally on injury,
Progress,	Has a tendency to remain tranquil, and not to inflame, unless injured,	Has tendency to inflame and suppurate, and not to remain tranquil for long,	Slow growth; rarely, but at times ends in suppuration,	Essentially chronic; rarely terminates by suppuration;	Very indolent and insidious; tends to inflame and suppurate after an uncertain period,	Unequal; never inflamed,	Rapid as a rule; rarely slow,
Condition of cord,	Free and healthy,	Healthy,	Often full and tender on manipulation,	Free,	Healthy,	Healthy,	Full; veins enlarged,
Results of tapping, exploratory or otherwise,	Straw-colored, serous fluid in *vaginal*; limpid, opalescent in *encysted*,	Blood fresh, or broken up with pus.	—	—	—	*Mucoid fluid*, more or less blood-stained,	*Blood* or *creamy fluid*, with characteristic cell-growth on microscopical examination,
Condition of inguinal and abdominal glands,	Free and healthy,	Healthy,	Healthy,	Generally indurated,	Generally indurated,	Rarely involved,	Generally involved,
Complications,	Inflamed testicle,	None, unless hydrocele, or injured testicle,	Occasionally with hydrocele,	Hydrocele, almost always. Other syphilitic affections,	Rarely with hydrocele. Disease in other parts of body,	Rarely with hydrocele,	Cancer on other parts; rarely with hydrocele,
Organs involved	Occasionally double,	Never double,	Generally both organs, either separately or together,	Often both organs.	Both organs, as a rule, involved,	Always single,	Single as a rule.

Extracts from the Proceedings of the Obstetrical Society, of Berlin.
Translated by J. C. REEVE, M. D., Dayton, Ohio.

At the session of October 23, 1866, Dr. Scharlan reported a case of

RUPTURE OF THE UTERUS.

The patient was twenty-four years old, in labor the second time. In August, 1863, after a severe labor of several days' duration, she was delivered, with the forceps, of a dead child. Measurement of the pelvis, at that time, gave a difference of two centimetres (.78 of an inch) between the two oblique diameters, and showed it to be somewhat narrowed in antero-posteriorily.

On the 4th of September last, the labor began at 6 o'clock in the morning; the waters broke on the 6th, when the os was but little dilated; on the 8th, a practitioner was called to attend her. During the evening of this day, the patient made extreme voluntary effort to assist herself. On the 9th, at 3:30 A. M., the pains suddenly ceased, after one of great severity; and the head, which, until then, had rested at the brim of the pelvis, with considerable tumor of the scalp, receded upwards. Dr. S. saw her at 7 o'clock, A. M. In the abdomen, at the level of the umbilicus, a round body could be felt, contracting upon pressure; the percussion sound around it, tympanitic; high up in the abdomen, and immediately beneath the parieties, parts of the child could be felt; blood was issuing from the genitals; at the brim of the pelvis, the head lay in the second position, and easily movable. Measurement of the pelvis showed a difference of two centimetres between the two oblique diameters; antero-posterior diameter, eight centimetres (3.15 inches); therefore an obliquely deformed pelvis, narrowed in its conjugate diameter. The diagnosis was: rupture of uterus, with escape of the breech of the child into the abdominal cavity, shown by the physical signs, and sustained by the continuous escape of blood, and the state of general depression of the patient. The fœtal heart-sounds were not perceptible.

Immediate delivery being imperative, the reporter thought it could be best effected by the cephalotribe, and made an attempt with Martin's fenestrated instrument. On account of the high position of the head, and its movability, it could not be surely grasped, and upon turning the screw, to approximate the blades,

they began to slip. A second trial likewise failed. Nothing then remained but version, which would gladly have been avoided, if possible, because the return of the child through the rent would undoubtedly increase it; and this procedure, therefore, added to the gravity of the prognosis, which was already bad enough. Passing the left hand beyond the head, it entered the abdominal cavity through a large opening, and keeping in contact with the body of the child, the operator found the right foot in the epigrastic region, and slowly and carefully effected version, retracted the breech, and brought down the arms; the head could not be delivered, on account of the pelvic deformity, until the cephalotribe had been used. The child, a female, weighed six pounds and ten ounces. The placenta was easily delivered, and the uterus contracted well.

Immediately after delivery, an ice-bladder was placed on the abdomen, the catheter was directed to be used three times daily, and the most perfect quiet, and avoidance of all errors of diet enjoined. The next night was sleepless, said to be on account of frequent after-pains. At 10 o'clock the next day, the temperature was somewhat increased, pulse 96, uterus contracted, lochia normal, scarcely any tenderness of abdomen. In the course of the day, vomiting of greenish matters began, on account of which, small doses of opium were ordered. In the night, the vomiting increased; and as the patient did not retain the iri opii, at 11 o'clock a sub-cutaneous injection of one-sixth of a grain of morphia was made in the epigastric region, after which the vomiting ceased, and sleep followed. The ice applications and use of catheter were continued. In the afternoon of the following day, the condition of the patient was satisfactory, temperature and pulse-frequency somewhat increased, very moderate meteorismus. On the 12th, the condition was the same; during the night vomiting had recurred, for which the morphia injection was repeated; meteorism and tenderness moderate, temperature moderately increased, pulse 100, uterus well contracted, lochia normal, sensorium unaffected; all of which was also observed by Dr. Martin, who visited the patient in company with the reporter. Notwithstanding the most stringent directions as to quiet, toward evening the patient had her bed changed; soon after this, she began to be delirious, and died on the 13th, at three o'clock in the morning.

The post-mortem examination showed blood over the intestines and uterus, a clot weighing half a pound lying in the utero-rectal fossa, the peritoneum injected, but without exudation; the rent was mostly in the neck of the uterus, as is usually the case, the os being unaffected; it ran from left to right, and from above, downward, part of the way extending through the peritoneum, and part of the way concealed by this membrane; its entire length was 5.19 inches. The pelvis was obliquely deformed—its left half presented a marked contrast with the right, the symphisis of the pubis being pushed over toward the right. The following are the principal measurements, reduced to inches: antero-posterior, 3.34; transverse, 4.72; left oblique, 4.33; right oblique, 4.64.

In his remarks upon the case, Dr. S. said he would not undertake to decide the question whether a tissue-change of the uterus had been the cause of rupture or not; the fatty degeneration of fibres shown by the microscope might have been a physiological, instead of a pathological product, considering the period at which the woman died. He called attention to the fact that the pelvis was smaller in its left half than in its right; nevertheless the first labor was accomplished with safety, although the occiput had to pass this smaller part; while, in the second labor, the head being in the second position, and thus more favorably situated, the rupture occurred. A point of prime importance as to the cause of the accident, appeared to him, could be found in the extreme voluntary efforts of the patient, exercised before the os was dilated, and by which a continuous bruising of the neck of the uterus against the pubis was produced; a cause which had also been assigned by Prof. Martin, in a similar case, reported at a previous session.

Dr. Gusserow referred to the ample statistics of Trask (*Am. Journal of Med. Sciences*, 1848 and 1856), upon the treatment of rupture of the uterus. According to this authority, 78 per cent. of the mothers died under expectant treatment, 68 per cent. after delivery by the natural passages, and 24 per cent. when gastrotomy was performed. In such cases, therefore, this operation should be resorted to.

Dr. Spiegelberg referred to the collection of cases by Von Franque, in which those treated by gastrotomy all terminated fatally.

Prof. Martin said that, in his opinion, the operation of gastrot-

omy would only afford favorable statistics when limited to cases in which the child had entirely escaped into the abdominal cavity.

Dr. Spiegelberg read the following

Observations upon incisions of the neck of the uterus, and of the uterine mucous membrane, as a means of checking the hæmorrhage resulting from sub-mucous fibroids.

Hæmorrhage is well known to be the severest symptom of submucous fibroids, and the one for which our assistance is the most frequently required, and whose treatment causes us the most anxiety. Although we were, up to a recent period, almost powerless to control the hæmorrhage in these cases, where the removal of the cause could not be effected, we possess now not only a safe mode of treatment, but one which is generally satisfactory, moderating the loss of blood, and often stopping it entirely, although generally for but a limited period. I allude to injection of the cavity of the uterus, especially when Routh's and Savage's plan of first dilating the cervical canal is followed.

Another means of checking the hæmorrhage, also claimed to be without danger, was proposed a few years ago by Baker Brown, (*London Obstetrical Transactions, III*, 1862); it consists in incision of the mouth and cervical canal of the uterus, and I call your attention briefly to this mode of treatment, and the more readily because it had been found efficacious by Nelaton and by McClintock, (*Clinical Memoirs*, p. 149.)

Brown and McClintock divided the external orifice and vaginal portion of the cervix deeply; that they carried the bistoury higher up I can not find stated in their reports. It appears to me probable, however, that they did, in view of the results obtained, for from this simple division of the cervical portion which I performed at first in some cases, according to Brown's directions, I have never observed the slightest influence upon the hæmorrhage. On the contrary, since then I have treated five cases of broad-based submucous fibroids, by division of the mucous membrane to and above the interior os with favorable results. In three of the cases decided improvement and cessation of the hæmorrhage followed; but in these three cases the tumors came down to within a short distance of the inner os, while in the two in which the operation was without benefit they were situated high up towards the fundus. This difference of result depending upon difference of situation of the

tumor is explicable when we consider the way in which these incisions act in checking the hæmorrhage. It is not, as Brown maintains, in consequence of a contraction of the body of the uterus about the new formation, rendered possible by the division of the uterine cervix, that the hæmorrhage ceases, but certainly only in consequence of the relief of tension of the mucous membrane effected by its division, and the retraction, contraction and atrophy of its vessels, which are the source of the flow following thereupon. If now the fibroid projects down to the internal os, the incision divides the stretched and vascular mucous membrane, but if not it remains intact, and in this case the operation fails.

In calling your attention to and recommending this mode of operating, so beneficial in cases adapted to it, and so void of danger, I will take the liberty of describing, in conclusion, the manner in which I proceed. I first dilate the os with sponge tents sufficiently to admit the index finger; upon this I introduce a probe-pointed bistoury with a long handle, and straight or curved, as may be necessary; I carry the blade into the cavity of the uterus about half an inch, never more than an inch, and bringing it back with gentle pressure, divide the mucous membrane to a depth of about a line down to the external os uteri. Two such incisions, opposite to each other, are sufficient; I do not carry the bistoury farther into the uterus than an inch, or at least do not incise farther than this, because of the danger of cutting beyond where the finger can watch and guard the knife. To allay the bleeding and to prevent union of the divided parts, a dressing of oiled lint is firmly applied, by means of a uterine sound, and renewed, daily, for a few days.—*Monatsschrift fur Geburtshulfe.*

BIBLIOGRAPHY.

Medical Bibliography: 1866.—We invite our readers' attention to the complete list of Medical Publications, both American and English, for the year 1866, placed in this number of the *Journal* by our Publishers: such a list must be of great interest and value to the profession.

In this connection we can not speak too well of the large collec-

tion of American and English medical works kept in stock by ROBERT CLARKE & Co., and of their unsurpassed facilities for the importation of foreign works: we speak with perfect freedom on these points, for we have not any personal interest in the matter, and knowing whereof we affirm, from actual observation and experience, we feel that physicians will be grateful for this information, and will often gladly avail themselves of the advantages thus offered. T. P.

Nouveau Dictionnaire de Medicine et de Chirurgie Pratiques.

The publication of this work was commenced in Paris in 1864, and has reached its fifth volume. Among the names of the editors we find Denuce, Alf. Fournier, Giraldes, Gosselin, Richet, Nelaton, Ricord, Langier, Liebreich, Tardieu, Trousseau, and others—a sufficient guarantee that when completed it will form one of the most valuable works ever issued from the French press. The articles appear in alphabetical order, and as the fifth volume has not reached the letter "C," it is evident that considerable time must yet elapse before this great work can be completed. Under the various definitions given, complete monographs follow. For example: Under the term *Articulations*, we have about two hundred pages; under *Ascites*, over fifty pages; and under *Asthma*, one hundred and fifty-seven pages. Richet devotes one hundred and eighty-six pages to *Aneurism*, and each article concludes with a most complete bibliography. As an evidence that the contributions of our own country have not been overlooked, we may mention that M. Richet, in discussing the value of the treatment by manipulation, as proposed by Sir William Fergusson, from page 343 to page 349, makes frequent reference to the case of femoral aneurism which we successfully treated some ten years since in the Commercial Hospital of this city, and in which we combined with manipulation, compression and the use of veratrum viride. Indeed, the work thus far seems to form an exception to many hitherto published in Paris, and which seem to have been written by the authors as if they truly believed that out of that renowned metropolis, little worthy of note had been recorded. The work when completed will contain a most comprehensive summary of the present state of our knowledge in every department of the healing art, and will truly constitute just such a *Dictionary of*

Practical Medicine and Surgery, as every physician acquainted with the French language must desire to have in his library.

G. C. B.

The Half-Yearly Abstract of the Medical Sciences, &c. Vol. XLIV. July—December, 1866. Republished by H. C. Lea, Philadelphia: 1867. Robert Clarke & Co., Cincinnati. Price $1 50.

American physicians may be congratulated that they are once more favored with the reprint of "Ranking's Abstract." If any doctor is so busy that he can read but a single volume a year, be a mere *unius libri*, then, assuredly, he should make this his book; for here are collected and condensed the most valuable contributions to periodical medical literature—French, German, British and American—for the year; and, on the other hand, no physician—it matters not how wide the range of his reading—can fail to find, in this volume, truths that will enlarge his medical knowledge, and precepts that will help him in some of his daily professional needs.

T. P.

On the Action of Medicines in the System. By F. W. HEADLAND, M. D. Fifth American from the Fourth London Edition. Lindsay & Blakiston, Philadelphia: 1867. Robert Clarke & Co., Cincinnati. Price $3 00.

It speaks well for this volume that it should pass so rapidly through so many editions. This is the substance of the commendation that we have read in foreign journals. Heartily concurring in this, we wish also to add that the demand thus exhibited for Dr. Headland's work, speaks well for the medical profession—well for it in its present attainments, and for its future progress. To the teacher of therapeutics, no matter whether he accepts in whole, or only in part, its distinguished author's teachings, the work is invaluable; while its diligent perusal and faithful study by the busy practitioner, can not fail to make him more intelligent and successful in his life-business; and with such growing intelligence and success the practice of medicine will cease to be, if it was before, a wearisome drudgery and a tiresome trade, and become more and more a joyful labor and a noble profession.

This edition is but little changed from the last—indeed, we think some other additions and discussions might have been given; nor are we quite satisfied with more than one theory Dr. Headland

presents—nevertheless, taking it all in all, we must believe his book is one of the most valuable contributions of this century to rational medicine. T. P.

The Renewal of Life. Lectures Chiefly Clinical. By THOS. K. CHAMBERS, M. D. Second American from the Fourth London edition. Lindsay & Blakiston, Philadelphia: 1867. Robert Clarke & Co., Cincinnati. Price $5 00.

This invaluable work ought to receive a warm welcome from every medical man in the country. The rapid exhaustion of all former editions in England, indicated their merits and appreciation by the profession in that country. This contains six hundred pages, and is divided into over fifty chapters; each a clear, terse, practical, and highly instructive, as well as entertaining monograph on the disease to which it refers. The young practitioner who yearns for more knowledge and skill, and every earnest and inquiring lover of his profession, will make this book his first companion as he enters his library, until it has been read and re-read; and if, as he often does, he finds himself puzzled and doubting, at the bedside, he will be solaced with the thought that to its pages he can look with confidence for a clearer understanding of his case, and its proper management, if the malady be one treated of in either of its chapters, or illustrated by any of the great number of cases referred to in them. So attractive is the author's style, that the reader is equally interested and profited by its perusal. In this edition, Dr. Chambers more than sustains the high reputation heretofore won in former editions, and in his excellent book, issued a few years ago, on "Digestion and its Derangements." The motto, "Renewal of Life," is a key to its objects, or rather its philosophic tenor, assuming that disease is deficiency of vital action, and that treatment should be directed to its renewal. It is elegantly executed and bound, and has an index unusually full and convenient. T. P.

OBITUARY.

Died—At East Cleveland, Ohio, on the 28th of March, Prof. JOHN DELAMATER, aged 80 years.

Thus has death severed one of the few links which connect us to a past generation; taken from the world a good man, and from the ranks of the profession one of its brightest ornaments. The passing away of such a man demands more than a passing notice. It is not only appropriate to record his labors and sketch his career, but his high professional standing, his wide-spread reputation as a lecturer and teacher, above all, his spotless character as a man, and his many private virtues, demand recognition, and acknowledgment that an influence always exerted for the benefit of the profession may be extended and perpetuated.

Dr. DELAMATER was of French extraction, as his name indicates; he was born in Duchess county, New York, in the year 1787, and very early in life manifested an ardent desire for the study of medicine. At that early day the opportunities for preliminary and professional education were not plenty or easy of access; but all obstacles were overcome by earnest and determined effort, and he commenced the practice of his profession when not more than twenty years of age, having been licensed, according to the laws of the State of New York, on the 1st of December, 1806. He has continued in practice ever since that time, and his public professional career may be sketched as follows: In 1823, he lectured on Materia Medica and Pharmacy in the Medical College at Pittsfield, Massachusetts, and during the three years following was Professor of Materia Medica and Obstetrics at the same institution. From 1827 to 1837, he lectured on Surgery at the Medical College of Fairfield, Herkimer county, N. Y.; and from 1837 to 1839, on the Theory and Practice of Medicine, and on Female Diseases; and for the term of 1839–40 on Obstetrics. From 1841 to 1843, both years inclusive, he was Professor of General Pathology, and Materia Medica in the Geneva Medical College. While holding the above appointments, and previous to the year 1842, he also delivered six courses of lectures on the Principles and Practice of Medicine in the Medical School of Maine, connected with Bowdoin College; three courses on the same subject, and one course on Materia Medica at Dartmouth College; one course on Surgery, and one on Obstetrics, in the University of Vermont. In the year 1835 he came to Cincinnati, but resided here only a short time; he lectured during one winter on Surgery, at the Medical College of Ohio. Shortly after this time the University of Willoughby was established, and Dr. DELAMATER was appointed Professor of Obstetrics and of the The-

ory and Practice of Medicine. He lectured upon those branches in that institution until 1842, when, with some of his colleagues, he was instrumental in founding the Cleveland Medical College, as the Medical Department of Western Reserve College; he removed to Cleveland at that time, and has resided there ever since, lecturing upon Obstetrics and Diseases of Women and Children every winter until within a few years past, when the increasing infirmities of age compelled him gradually to withdraw from public duties. In 1860, the degree of Doctor of Laws was conferred upon him by the Western Reserve College.

A glance at the positions he filled will show at once that he must have been a man of more than ordinary attainments and ability. Probably few men, anywhere, certainly none in the west, have occupied so many different positions as a medical teacher, lectured upon so many different subjects, or have been directly concerned in the instruction of so many medical students. Some of the institutions had very large classes of students for years in succession, and to all of them his name was a pillar of strength. As a lecturer, he was methodical, careful and clear; aiming to impress the knowledge, and the importance of the knowledge, without making any effort at rhetorical flourish or ornament; always dignified and refined, his manner impressed upon young men entering the profession, what he daily inculcated, the honor of their calling, its solemn responsibilities, and the duty of conscientious effort to master its knowledge.

As a man his character may be said to be without reproach. No one probably ever availed themselves more of the abundant opportunities afforded by the practice of medicine for charity to the diseased and afflicted than did Dr. Delamater. To the promptings of a kind heart, in this regard, must be added the influence of a religion, which with him was neither a sentiment nor a fashion, but a reality, for daily guidance of life and conduct. That it governed his inner life as well as regulated his actions, there is no doubt: but few men have been called upon to suffer more severe domestic trials and afflictions than was he. As a single instance, it may be mentioned that he once said his wife was such an invalid that, during a period of twenty years, there was not a single night in which she did not require his services! Yet he was never heard to murmur or complain. The writer of this can bear testimony to the calmness with which he bore some of the most severe strokes of sorrow.

We may well grieve at the loss of such a man. As a practitioner and teacher of medicine, as a citizen, and as a Christian, he was an honor to the profession; his life and character furnish an example which it would be well for the young to follow. R.

MISCELLANY.

Surgeon-General McDermont's Report, and Dr. Reeve's Endorsement and Deductions

MESSRS. EDITORS:—In the February issue of your excellent JOURNAL, I find a communication from your accomplished correspondent, Dr. J. C. Reeve, heartily endorsing the recent Report of Surgeon-General McDermont, with extracts which are worthy of serious consideration.

If the statements and conlusions of this Report and communication are correct, we certainly have, as a profession, a very important reformatory work on hand. If these gentlemen are mistaken, either in their facts, their reasoning, or their conclusions, it is at least proper that their errors be pointed out.

It is proposed to confine attention to a few paragraphs, which, that no injustice may be done, are inserted in full:

"The eminence accorded to Ohio surgeons for skill and fidelity in the late war, was not due to any merit in our system of medical education, but to the faithfulness of the Examining Board.

"The gentlemen composing this Board were distinguished for integrity, patriotism, and professional ability. Animated by an earnest zeal for the efficiency of the service, they recommended for appointment only those who possessed the requisite qualifications. None but graduates of regular medical schools were admitted to examinations, and yet *over eighty per cent. of these were rejected for incompetency.* The ignorance betrayed by many of the candidates was deplorable, proving that the diploma of a medical college has ceased to be of any value as evidence of capacity."

To this quotation Dr. Reeve adds:

"*From this official record there is no appeal; from this evidence, furnished by stern experience, there is no escape; and the testimony is as damning in character as it is overwhelming in weight. Neither can*

the deduction from the facts be avoided, and it is plainly made by Dr. McDermont, to whom the profession is indebted for the origin of this bill, and who has recommended, in his Report, the establishment of a Board of Examiners for times of peace as well as war."

Then follows another question containing the quotation here endorsed by Dr. Reeve: "If it was the duty of the State, as all concede, to provide competent physicians for the the soldiers, it is no less a duty to make similar provisions for the citizens; *and yet those rejected candidates, with hundreds of others equally incompetent, are now scattered over the State, pursuing their fatal trade with criminal recklessness.*"

The *italics* in all the above quotations are ours. With the question of protective legislation, for the present, the writer has nothing to do.

It is proposed to confine attention to the statement of facts and conclusions, and the denunciation thus officially promulgated, and heartily endorsed.

And here it it necessary to insert a bit of history.

In 1861, soon after the commencement of the war, the Legislature passed an act devolving it on the Governor to appoint a Board of not less than three competent surgeons, to examine applicants for the position of surgeon or assistant surgeon, in the regiments to be organized; and prohibiting the Governor from appointing any except such as this Board should examine and approve. Governor Dennison appointed Prof. Geo. C. Blackman, Dr. L. M. Whiting, and the writer hereof, as the first board, under this act. After a few weeks, the Governor, as a matter of convenience, and to facilitate the public business, reorganized the Board, so that it might all be at the capital. The new Board consisted of the venerable Dr. Wm. M. Awl, Prof. S. M. Smith, and the writer. Of both these Boards the writer was secretary.

Before a single examination was made, it was determined, for the protection of the rights, feelings, and interests of all concerned, to make the whole thing a matter of record.

About 30 questions were prepared by each Examiner. These were printed on a large sheet, with blanks for written answers. All the accepted candidates were assembled in the Hall of the House of Representatives. Each was provided with a separate table, stationery, and successively with his three blank sheets, and was required to fill them in the presence of all the Board, without referring to

books, communicating, or leaving the room. The blanks being all filled, the Board had the means of leisurely preparing a graduated list of all the candidates.

The first Board held two, and the second three, public examinations. The secretary filed away the certificates of standing, graduation, etc., and the filled sheets of each candidate, in a large envelope, duly sealed and labeled. These are now, with the exception of a small package in his possession, thoroughly systemized, and in a state of perfect preservation. So far as these examinations are concerned, he is prepared to give the exact official facts and figures, and no one else is.

And now for the record:

These Boards, acting during the year 1861, admitted 330 candidates to examination, under their rules. Of these—five, after attempting, more or less, to answer the questions, withdrew; nineteen failed to appear; 306 undertook to pass the ordeal; forty-two were admitted to a second examination.

And now as to the result: and here an explanation is called for. At that time it was impossible to foresee the wants of the service. Applicants seemed to be in excess, and the Board established and maintained a higher standard than it probably would have felt justified in, if the extent of these wants could have been foreseen. Two mathematically graduated lists—one of surgeons, and one of assistants—were the result of each of these examinations. These lists were handed to the Governor, and unfortunately no permanent record of them was kept. We are obliged, accordingly, to open these envelops, and copy the summing up of each sheet, or rely upon the roster, as published in Surgeon-General McDermont's Report, for the result. But many of these who were not successful with the first and second, applied to subsequent Boards. The object at present, is to state exactly what was the final result with these 306 candidates. Making no account of such as may have entered the National Guard, the three, or six months, or any other than the three years service, the result is as follows: Whole number approved as surgeons, and assistant surgeons, by the first, second, and subsequent Boards, 263; Whole number rejected 43. Of the successful a word: The great body of them were graduates of the medical colleges of our own State. Three were graduates of European Universities. The graduated lists were nearly all headed by the graduates of some one of our Ohio medical schools. Most of those approved as

assistants, were promoted to surgeons. Twenty-one were promoted to brigade surgeons. Now a word as to the 43 unsuccessful. Three, four, or five, were graduates of European Universities. Two, who were each twice examined for assistants, failing as often, went to Washington, were examined, and appointed brigade surgeons. Three others whom the rules of those Boards debarred from examination, did likewise, and with the same result. A considerable proportion of the residue are personally known to the writer as successful and worthy physicians, and respected and honored citizens.

More than 85 *per cent. of these* 306 "*graduates of regular medical schools*," "*admitted to examination*," *were approved and commissioned.*

Less than 15 *per cent* "*were rejected for incompetency.*"

And from this statement of "the official record there is no appeal," except to the record itself: "from this evidence furnished by stern experience there is no escape:" and it is respectfully suggested to those worthy gentlemen to decide, at their leisure, whether, so far as the pivotal point—the "more than 80 per cent" part of this report is concerned—there is anything of "damning character," and "overwhelming weight" about these figures. From the beginning of the year 1862, the examination of surgeons devolved upon others, and the writer had nothing to do with it. That it was well and satisfactorily done, this Report of Surgeon-General McDermont very fitly attests. The writer disclaims all pretension of knowledge as to the facts and figures of these latter examinations, except as furnished by this Report. Accepting for the present, the definite statements therein made as correct, let us see to what conclusions they lead. The number of regimental surgeons, excluding brigade and contract surgeons, is stated on page 4, to have been: of regimental surgeons 287; assistant surgeons 649; making in all 936 approved by the various Boards of Examiners. This number, represent, on this basis of "more than eighty per cent rejected," less than one fifth of all examined. The number of the examined, accordingly, must have exceeded 4,680. The number of the rejected must have exceeded 3,744: and "these rejected candidates," probably exceeding by more than half a thousand all the "graduates of regular medical schools" in the State, "with hundreds of others equally incompetent," are thus officially denounced as "scattered over the State, pursuing their fatal trade with criminal recklessness."

And this official pronunciamento finds, in your worthy corres-

pondent, a hearty indorser. To err is human: a blunder—even an official blunder—should, perhaps, ordinarily be veiled with the mantle of charity. So we are disposed to treat the errors of this Report. But in so doing, we do not propose to lose sight of the fact, that, at a time when the profession of the State merits only plaudits, in terms, though evidently unintentionally, it reads the great body of the profession out of respectable standing, and denounces them constructively as criminals; that it assumes to be a State document, the "Report of the Medical Department of State;" that as such it will find a lodgement in the archives of the State; to err at such a time, under such circumstances, to such an extent, so unnecessarily, professedly in the interest of reform and advancement, and in apparently profound obliviousness of the magnitude and importance of the interests at stake—we leave for those worthy gentlemen themselves, after mature deliberation, to characterize in just such terms as they may deem fit and proper.

J. W. HAMILTON.

Columbus, O., March 26, 1867.

Case of Mal-presentation. By ISAAC U. ROSENTHAL, M. D., Fort Wayne, Indiana.

I was called upon to attend Mrs. W., who was in confinement. Labor-pains, which for four hours had been very severe, had ceased about half an hour before my arrival. It was impossible to determine the nature of the presentation until after the escape of the liquor amnii, when I distinctly felt the occiput presenting. Pains were re-established by the use of ergot; and I then found one hand and one foot encircling the previously presenting part. The hand and foot were restored to the cavity of the uterus, and delivery was soon accomplished. The child was partially asphyxiated, the cord being wound twice around the neck, and then passing under the arm. Pressure-marks afterward showed it to have been the left foot which presented. Probably this curious presentation was caused by the large size of the pelvis, and an unusually large quantity of liquor amnii.

I consider this case interesting, on account of its rarity, and the difficulty of diagnosis attending it—one naturally expecting to find twins in such presentations.

Rhigoline.

MUNCIE, Ind., March 26, 1867.

EDS. JOURNAL:—The enclosed slip I found in the Oskaloosa (Iowa) *Herald*, of March 21. This is the first instance I have seen any account of, in which *Rhigoline* has been caused to explode from the stimulus of light alone. If the account is true, as I see no reason to doubt, must we not regard it as an agent requiring great caution, or possibly one for which we had better substitute ether?

Respectfully, G. W. H. KEMPER, M. D.

"SERIOUS ACCIDENT—ALMOST.—Dr. M. L. Jackson recently procured a newly invented compound—prepared for dental operations—called *Rhigoline*, which will explode if exposed to the light for any considerable length of time; he placed it in a dark room, and supposed all was safe. On Thursday last, while engaged in his office, he heard an explosion in the dark room, and rushed in to see what had happened; he found the room full of gas, and made for the outer door. He succeeded in getting out, and closing the door behind him, when he fell insensible upon the floor. Upon the return of consciousness, he made a careful examination, and found that the window-shade had been partially drawn aside, admitting a ray of light which struck the bottle containing the dangerous compound, and hence the explosion."

Early Menstruation. Communicated by W. A. SIMMONS, M. D., of Boonesboro', Iowa.

I was recently called to give my opinion in a medico-physical point of view, in relation to the following case:

M. F. P., aged eight years, of short stature, fair skin, nervous-sanguine temperament, commenced to menstruate at the age of *seven years* and seventeen days, and has had a catamenial discharge regularly every lunar month since that period—one year.

The mental and physical signs usual at such times in menstruating women, are well marked. She is rather larger than girls of her age, and usually healthy. The mamma are developed but slightly more than ordinarily, and no other signs of puberty. They are people in ordinary circumstances, and have not been surfeited

with the good things of this world, *exepting* plenty of out-door exercise.

Query—what is the cause, and will it prove deleterious?

Prize Essays.

As evidences of the tendencies of professional thought and work in Europe, we give some of the topics proposed by different learned bodies, for prize essays and questions:

The Belgian Academy of Medicine announces, among others, the following:

"Cancers called surgical, especially regarded from a therapeutical point of view"—a gold medal of 1,200 francs.

"A chemical and pharmaceutical examination of *Tanacetum Vulgare*"—medal of 500 francs.

"Examine what are the functions devolving upon the various portions of the encephalon, taking as the basis of these investigations, experiments on living animals, clinical and necroscopic observations, and the conclusions furnished by histology and comparative anatomy," an extensive inquiry—medal of 1,500 francs.

"The chemical history of digitaline"—medal of 500 francs.

All called for by April, 1868.

We notice also in the same number of *Medical Times and Gazette*, February 16, that a "Society of Experimental Therapeutists" has been formed in Paris, "the chief purpose of which is to ascertain, through experiments made on living animals, the real properties of active drugs, which clinical observations on the human subject can not always determine with a sufficient degree of scientific accuracy. Some interesting communications by Dr. Moreau, the physiologist, on the action of belladonna, were discussed at the first meeting. The leading members are Prof. Trousseau, Dr. Pidoux, Dr. Gulneau de Mussy, Dr. Gubler, Dr. Herard, etc." Prof. Trousseau's "Clinical Medicine" abounds in the manifold use of belladonna.

The French Academy of Medicine proposes for 1867 and 1868 the following, among other prize questions:

"The clinical history of fibro-plastic tumors"—value of prize 1,000 francs.

"The different varieties of melanosis"—1.000 francs.

"The best memoir on external pathology"—1,000 francs.

"Sanguineous effusions into the substance of tissues"—1,000 francs.

"Tumors of the encephalon and their symptoms"—600 francs.

"The best memoir on internal pathology"—1,000 francs.

"To establish by numerous exact and satisfactory facts, in man and animals, which pass from one climate to another, the alterations and modifications of function, and the organic lesions which are attributable to acclimatization"

Prize for 1870, and, as with the others, open to French and foreign physicians.—*Archives Generales*, January; 1867.

The Gulstonian lectures will be upon the "nature and affinities of tubercle," by Dr. Southey.

The Croonian lectures will be upon "The states of lung commonly comprehended by the term Pulmonary Phthisis," by Dr. Andrew Clark. Dr. Clark is a well known worker in this department of practice, and contributes his experience through various channels, among others, the London Hospital Reports.

The Lumleian lectures will be by Dr. Russell Reynolds, the Editor of the "System of Medicine," now in course of publication, and Dr. Burdon Sanderson, who is investigating the "Sphygmograph," and is now publishing his experience in the *London Lancet*. The respective subjects will be, "On certain points in the relation between medical and legal practice," and "On the mode and duration of the contraction of the heart in health and disease."—*Medical Times and Gazette*, Feb. 16, 1867.

Paris Faculty of Medicine.

It is admitted, even by the French press, that the glory of the Paris Faculty of Medicine is rapidly on the wane; that the vacancies caused by death, and the resignations of Bouillaud, Andral, Cruveilhier, Trousseau, Piorry, Grisolle and Jobert, are likely to damage irreparably the celebrity of the school. The majority seem to favor the re-establishment of the *concours*, but M. Guerin, it is said, although once its advocate, now entertains grave doubts of its efficacy. We copy from the *London Times and Gazette*, November 10, the following remarks of this surgeon:

"The *concours* is not fitted either to render justice, or to lead to the discovery of truth in the regions of elevated science; it is a means, rather, for bringing into prominence merits of a secondary order—information, memory, and the talent for exposition; but it

excludes all superiority and originality. Employed for nominations to the lower, or even medium grades, it is fitted to render evident that which is still in a latent condition. It may educe good pupils, and even those who may become masters; but it prevents the discovery of the masters themselves, and directly closes the door to their admission. In fact, it has not been sufficiently observed that for a *concours* we must have judges, and the judges furnished by schools are not more disposed to favor the advance of those opposed to them by this channel than by the mode of election. It is a truth of all times, that learned bodies, entrusted with the recruital of their numbers, no matter by what mode, only summon those who are partisans of their ideas, doctrines and practice. This truth is disputed only by those who are giving proof of its exactitude. It is true, as has been said, that the *concours* may be improved by a better selection of the juries; but still it will be the *concours*, and we maintain that meditative, original, and independent intellects will be scarcely disposed to manifest their superiority in this fashion. The preponderance which the Faculty has always accorded to abilities of a second rank, has stifled in its germ merit of quite another character."

M. Guerin proposes, as a substitute, that the Minister of the Interior should make choice of a candidate from three presentations made to him—one by the Academy of Sciences, another by the Academy of Medicine, and a third by the entire medical body of Paris.

We find in a recent number of the *Medical News and Library*, the following reference by Trosseau to his own resignation:

"When, well nigh thirty years ago, I was nominated a Professor, and went to call upon Orfila, he said to me: 'Will you have the courage to do what I have decided upon doing? I am one of the most popular of the Professors of the Faculty, and in all probability shall continue to be so for a good while yet, but as soon as I reach my 65th year, without waiting until the public ceases to follow me, I shall retire.' I will engage to do the same, I replied, and you may rely upon it, I shall not attain caducity in my chair. I have kept my word; for having just attained my 65th year, I have sent in my resignation. Let younger men come on, and if we all acted thus, our Faculty, although deprived of that grand institution, the *concours*, would recover its former splendor. The labor of practice is already oppressive for more than sexagenarian shoulders—that of teaching is impossible." B.

Should Cradles be Suspended or Supported?

The views of an old author are thus given, on this question:

"As the fœtus, hanging in the uterus of the mother, from the umbilical cord, is easily shaken this way and that, while the mother moves her body; hence it has been, not without reason, believed that new-born children delight in such an oscillatory motion, for which reason they laid children upon cradles, that they might enjoy this gentle exercise, and be more and more strengthened. Daily experience teaches us that the worst-tempered children are soothed by this gentle motion, and at last sink into a sweet sleep. But it is requisite that that shaking of the cradle should be gentle and equable. For which reason Maschion has said, 'Let the cradles either hang by cords, or have their feet and sides so contrived, above and below, as to be easily moved to either side.' The cradles that hang by cords are the best of all, as they may by a slight force be moved equally, and without noise. At the same time the motion communicated to these cradles is imperceptibly diminished, and at last ceases without any concussion."—*Van Swieten, in Bœrhave's Aphorisms, section* 1353.

Indiana State Medical Society.—Our Indiana readers will please remember that this Society will hold its annual session in May, convening on the third Tuesday of that month. We wish that the physicians throughout the State would heartily labor to make it one of the most largely attended and best meetings ever held by this industrious organization. T. P.

The editorial comments on the "Trial for Malpractice," by Dr. Prince, will be continued in the next Number.

To Subscribers.—Those who do not receive the *Journal* regularly, will please notify the Publisher promptly; and the Publisher kindly notifies some subscribers that their subscriptions for 1867 have not yet been received, while a very few—entirely from forgetfulness, we are aware—have actually neglected to pay for the year 1866: doubtless such delinquents will at once contribute to the financial success of the *Journal*, and to their own happiness by a prompt remittance.

Errata.—The writer makes no boasts as to his chirography, and is not the least incensed when printers declare that his manuscript is the worst that comes into their hands; but he is sensitive in regard to his orthography, and as to the accuracy of his quotations. Therefore we beg our readers to substitutes *causas* for *animo* on p. 181, March number of the *Journal*, and *Pædatrophia* for *Pœdeirtrophie*, on p. 182. T. P.

Through neglect in not paging the manuscript, the item "Circular No. 6," on page 190, of March number, was detached from its proper place, at the end of Dr. Blackman's Good Samaritan Hospital Reports, page 160.